



Federal Emergency Management Agency

Washington, D.C. 20472

July 13, 2016

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The Honorable Craig Cates
Mayor, City of Key West
P. O. Box 1409
Key West, FL 33041

IN REPLY REFER TO:

Case No.: 16-04-4341P
Community Name: City of Key West, FL
Community No.: 120168
Effective Date of
This Revision: **November 25, 2016**

Dear Mayor Cates:

The Flood Insurance Rate Map for your community has been revised by this Letter of Map Revision (LOMR). Please use the enclosed annotated map panel revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals issued in your community.

Additional documents are enclosed that provide information regarding this LOMR. Please see the List of Enclosures below to determine which documents are included. Other attachments specific to this request may be included as referenced in the Determination Document. If you have any questions regarding floodplain management regulations for your community or the National Flood Insurance Program (NFIP) in general, please contact the Consultation Coordination Officer for your community. If you have any technical questions regarding this LOMR, please contact the Director, Mitigation Division of the Department of Homeland Security's Federal Emergency Management Agency (FEMA) in Atlanta, Georgia, at (770) 220-5400, or the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our Web site at <http://www.fema.gov/national-flood-insurance-program>.

Sincerely,

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

List of Enclosures:

Letter of Map Revision Determination Document
Annotated Flood Insurance Rate Map

cc: Mr. Scott G. Fraser, CFM
Floodplain Administrator
City of Key West

Mr. William J. Tennis
DiamondRock KW South Owner, LLC

Mr. Jannek Cederberg, M.Sc., P.E.
Principal
Cumming Cederberg, Inc.

RECEIVED
JUL 18 2016



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	City of Key West Monroe County Florida	NO PROJECT	COASTAL ANALYSIS UPDATED TOPOGRAPHIC DATA
	COMMUNITY NO.: 120168		
IDENTIFIER	Sheraton Suites Key West	APPROXIMATE LATITUDE AND LONGITUDE: 24.553, - 81.772 SOURCE: FIRM Panel DATUM: NAD 83	
ANNOTATED MAPPING ENCLOSURE		ANNOTATED STUDY ENCLOSURES	
TYPE: FIRM*	NO.: 12087C1517K DATE: February 18, 2005	NO REVISION TO THE FLOOD INSURANCE STUDY REPORT	

Enclosures reflect changes to flooding sources affected by this revision.

* FIRM - Flood Insurance Rate Map

FLOODING SOURCE AND REVISED REACH

Atlantic Ocean – Area centered at approximately 1,900 feet southeast of the intersection of Linda Avenue and Government Road.

SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Atlantic Ocean	Zone VE	Zone AE	NONE	YES

* BFEs - Base Flood Elevations

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panel revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional information about the NFIP is available on our Web site at <http://www.fema.gov/national-flood-insurance-program>.

Patrick "Rick" F. Sacbbit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance stillwater elevations computed in the FIS for your community. A comprehensive restudy of your community's flood hazards could establish greater flood hazards in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Mr. Jesse Munoz
Director, Mitigation Division
Federal Emergency Management Agency, Region IV
Koger Center - Rutgers Building, 3003 Chamblee Tucker Road
Atlanta, GA 30341
(770) 220-5400

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our Web site at <http://www.fema.gov/national-flood-insurance-program>.

A handwritten signature in black ink, appearing to read "Rick Sacbibit".

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our Web site at <http://www.fema.gov/national-flood-insurance-program>.

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Patrick "Rick" F. Sacbbit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration



Federal Emergency Management Agency
Washington, D.C. 20472

**LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)**

PUBLIC NOTIFICATION OF REVISION

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below, and through FEMA's Flood Hazard Mapping Web site at https://www.floodmaps.fema.gov/fhm/bfe_status/bfe_main.asp.

LOCAL NEWSPAPER

Name: *Key West Citizen*

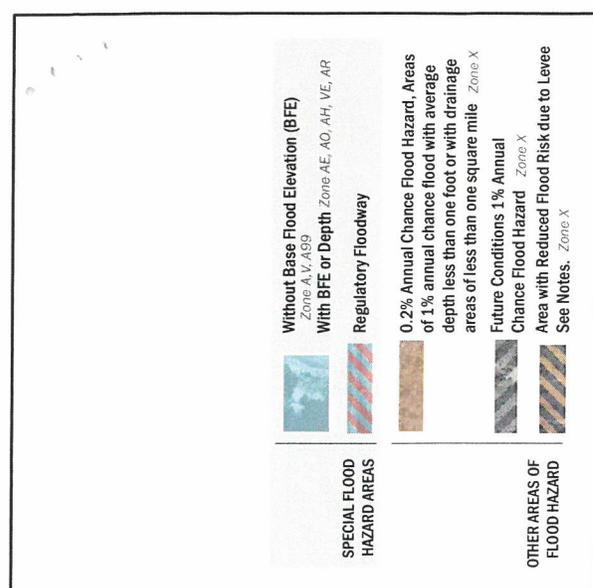
Dates: July 21, 2016 and July 28, 2016

Within 90 days of the second publication in the local newspaper, any interested party may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised flood hazard determination presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our Web site at <http://www.fema.gov/national-flood-insurance-program>.

A handwritten signature in black ink, appearing to read "Rick F. Sacbbit".

Patrick "Rick" F. Sacbbit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration



SCALE

NOTE: BASEMAP IMAGERY WAS OBTAINED FROM NAIP IN 2007.

Map Projection:
NAD 1983 UTM Zone 17N;
Western Hemisphere; Vertical Datum: NGVD 29

1 inch = 500 feet

0 250 500 1,000 Feet

0 75 150 300 Meters

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

MONROE COUNTY, FLORIDA
and Incorporated Areas

PANEL 1517 OF 1585

Panel Contains:

COMMUNITY	NUMBER	PANEL SUFFIX
KEY WEST, CITY OF	120168	1517 K
MONROE COUNTY	125129	1517 K

REVISED TO REFLECT LOMR
EFFECTIVE: November 25, 2016

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

MONROE COUNTY, FLORIDA
and Incorporated Areas

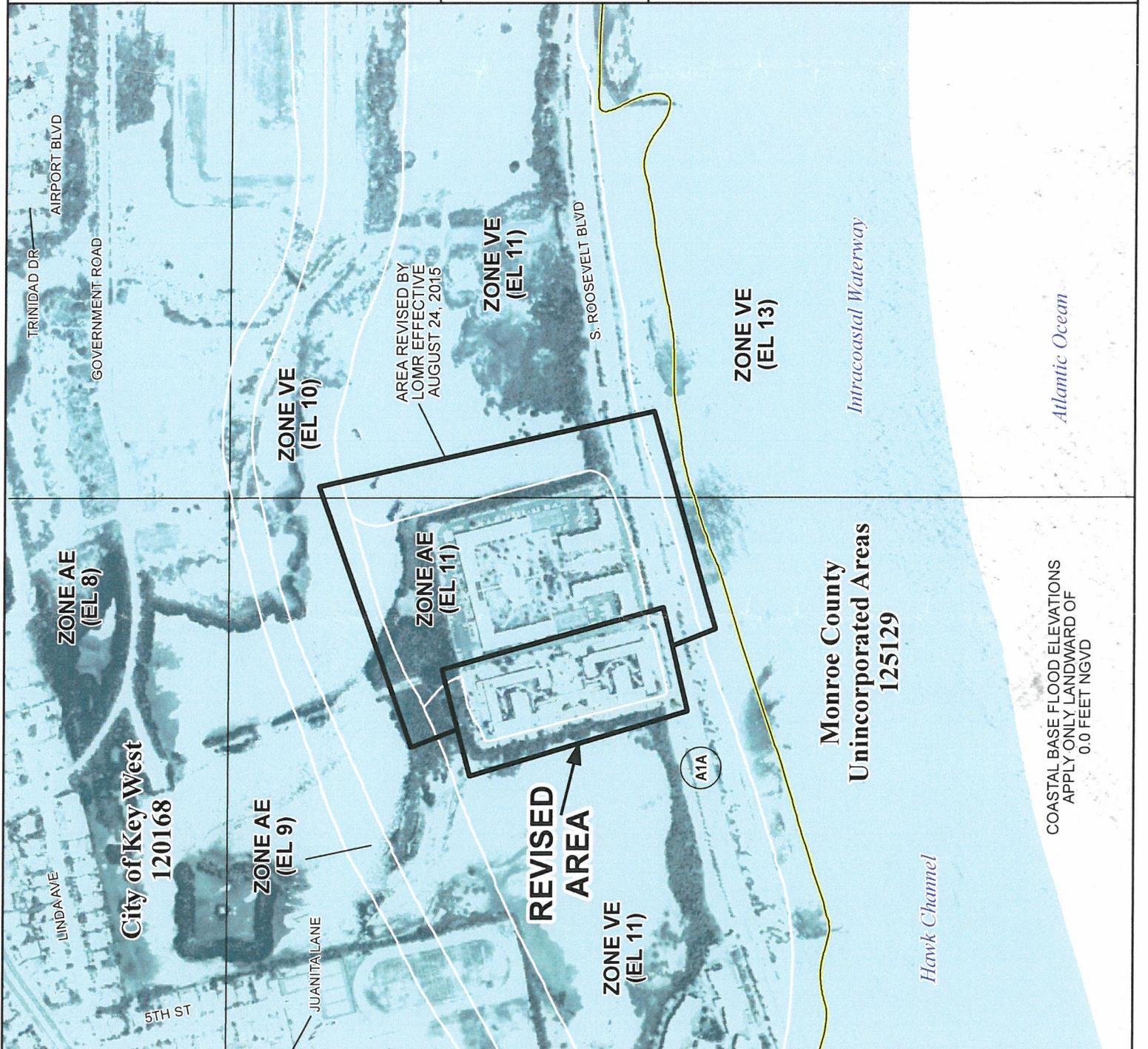
PANEL 1517 OF 1585

Panel Contains:

COMMUNITY	NUMBER	PANEL SUFFIX
KEY WEST, CITY OF	120168	1517 K
MONROE COUNTY	125129	1517 K

REVISED TO REFLECT LOMR
EFFECTIVE: November 25, 2016

VERSION NUMBER 2.1.3.0
MAP NUMBER 12087C1517K
MAP REVISED FEBRUARY 18, 2005



FEMA Letter of Map Revision Coastal Engineering Analysis

Sheraton Key West Key West, Florida

March, 2016

Prepared for:

Diamond Rock Hospitality Co.
2001 S Roosevelt Blvd
Key West, FL 33040

CUMMINS | CEDERBERG
Coastal & Marine Engineering

Prepared by:

Cummins Cederberg, Inc.
7550 Red Road, Suite 217
South Miami, Florida 33143
Tel. +1 (305) 741-6155
Fax +1 (305) 974-1969
www.cumminscederberg.com

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Appendix C – Proposed Flood Map Modification	

Section 1 - Introduction

1.1 Authorization

Cummins Cederberg, Inc. (Cummins Cederberg) was retained by Diamond Rock Hospitality Co. (Client) to conduct a flood map change analysis for the property located at 2001 S Roosevelt Blvd, Key West, Monroe County, Florida (Project).

1.2 Purpose and Scope

The purpose of the analysis was to provide the necessary documentation for changing the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) Flood Insurance Rate Map (FIRM) zone designation based upon a site-specific analysis incorporating local and recent survey data from the Project site. The scope of work includes an analysis of the eroded beach profile and wave conditions at the site based on the site specific survey data during a FEMA-defined 100-year storm event to evaluate the potential for a modification of the existing flood zone designations for the Project site.

Section 2 - Existing Conditions

2.1 Location

The 2001 S Roosevelt Blvd Property (Project) is located within the City of Key West on south side of the main island as illustrated in Figure 2.1. The Project property are located approximately 250 feet from the shoreline separated by the beach, a dune system and a main road.

2.2 Flood Insurance Study

FEMA's Monroe County Flood Insurance Study (FIS, 2005) shows the Project site located adjacent to transect 4, as illustrated in Figure 2.1. The Project site is exposed to the Atlantic Ocean. The FEMA published 100-year stillwater level for the area is 8.5 feet (including wave setup) referenced to the National Geodetic Vertical Datum of 1929 (NGVD).

2.3 Existing Floodplain

The existing floodplain boundaries for the Project vicinity are illustrated in Figure 2.2. Currently, the Project property is located within a VE11 flood zone.

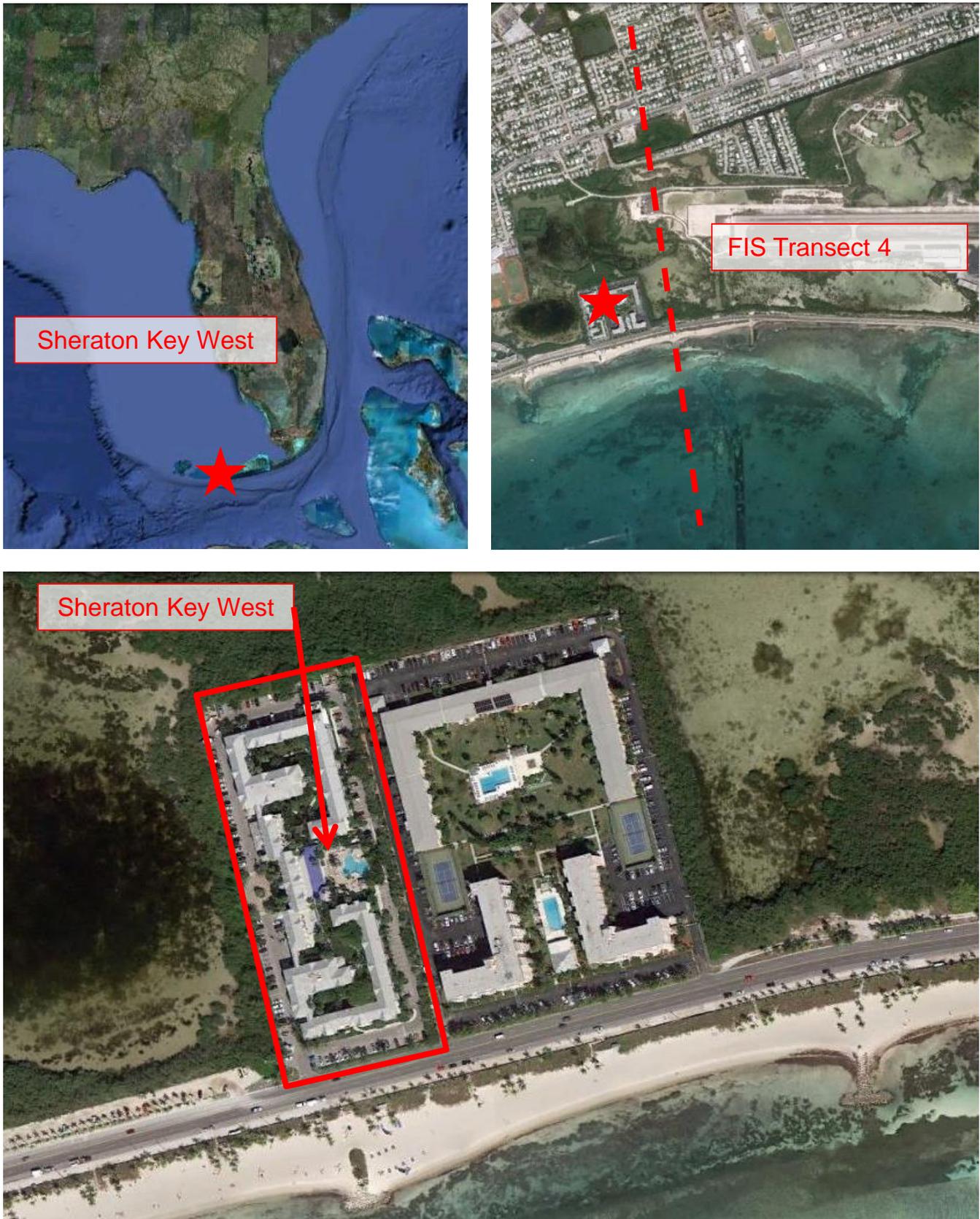
2.4 Topographic and Bathymetric Data

Topographic survey data was obtained from FLDEM and FIU and is provided in Appendix A. Two profiles were obtained, as illustrated in Figures 2.3 as well as 2.5A and 2.5B. Bathymetric information was obtained from the City of Key West .

2.5 Tide Levels

The Mean High Water (MHW) and Mean Low Water (MLW) levels were adopted from National Oceanic and Atmospheric Administration (NOAA) Tide Station No. 8724580 as +1.10 and -0.20 feet NGVD, respectively

FIGURE 2.1: LOCATION



Key West International Airport

SPECIAL FLOOD HAZARD AREAS

Without Base Flood Elevation (BFE)
Zone AL, AH, AR
With BFE or Depth Zone AE, AO, AH, VE, AR
Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
Future Conditions, 1% Annual Chance Flood Hazard Zone X
Area with Reduced Flood Risk due to Levee
See Notes, Zone X

SCALE

Map Projection:
Western Hemisphere, Vertical Datum: NGVD29

1 inch = 500 feet

1:6,000

0 250 500 1,000 Feet
0 75 150 300 Meters

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

MONROE COUNTY, FLORIDA
And Incorporated Areas

PANEL 1517 of 1585

Panel Contains:

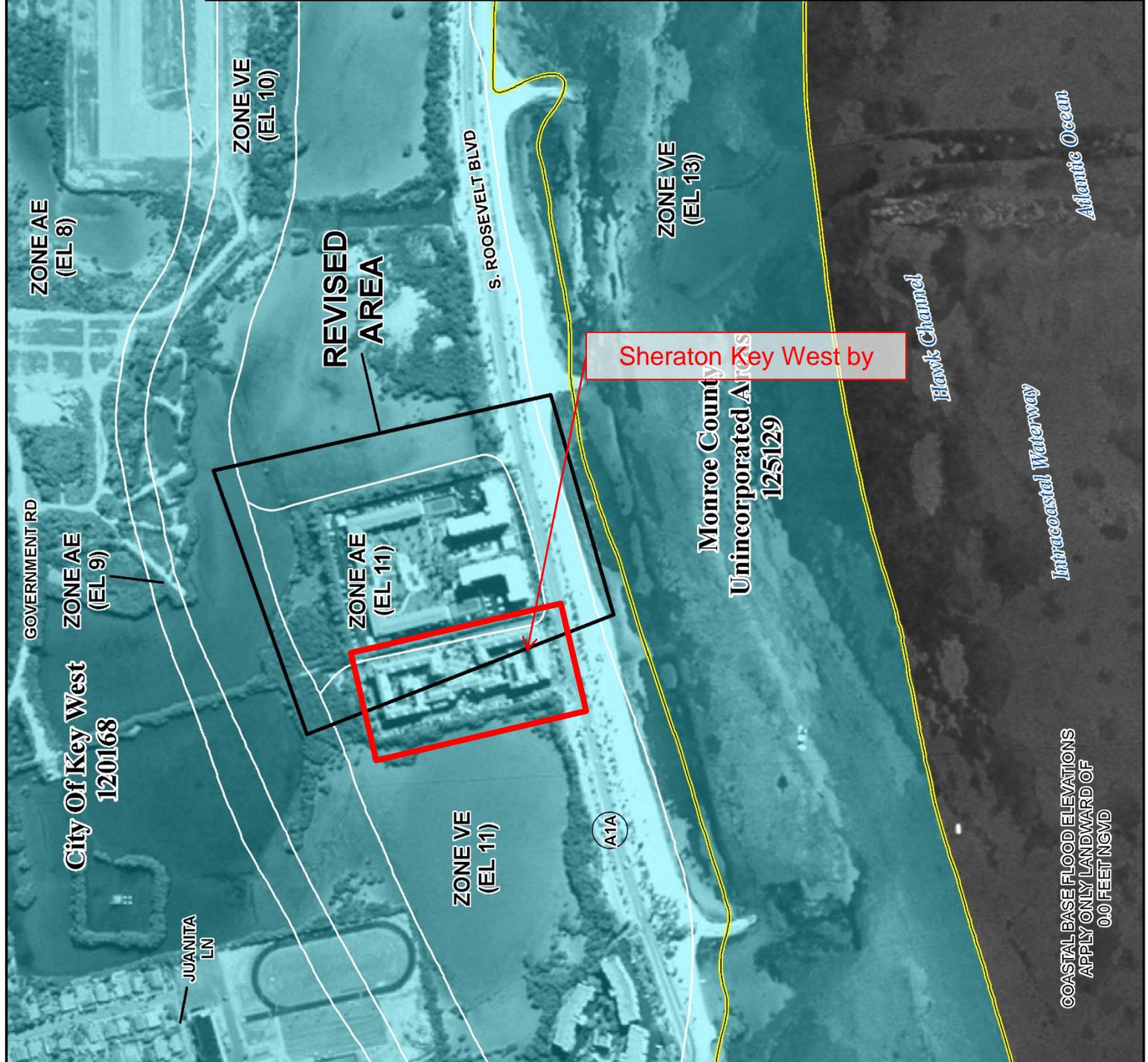
COMMUNITY	NUMBER	PANEL	SUFFIX
KEY WEST, CITY OF	120168	1517	K
MONROE COUNTY	125129	1517	K

REVISED TO REFLECT LOMR EFFECTIVE: August 24, 2015

FEMA

NATIONAL FLOOD INSURANCE PROGRAM

VERSION NUMBER 1.1.1.0
MAP NUMBER 12087C1517K
EFFECTIVE DATE FEBRUARY 18, 2005



COASTAL BASE FLOOD ELEVATIONS
APPLY ONLY LANDWARD OF
0.0 FEET NGVD

FIGURE 2.3: TRANSECTS



FIGURE 2.4: NOAA CHART 11441

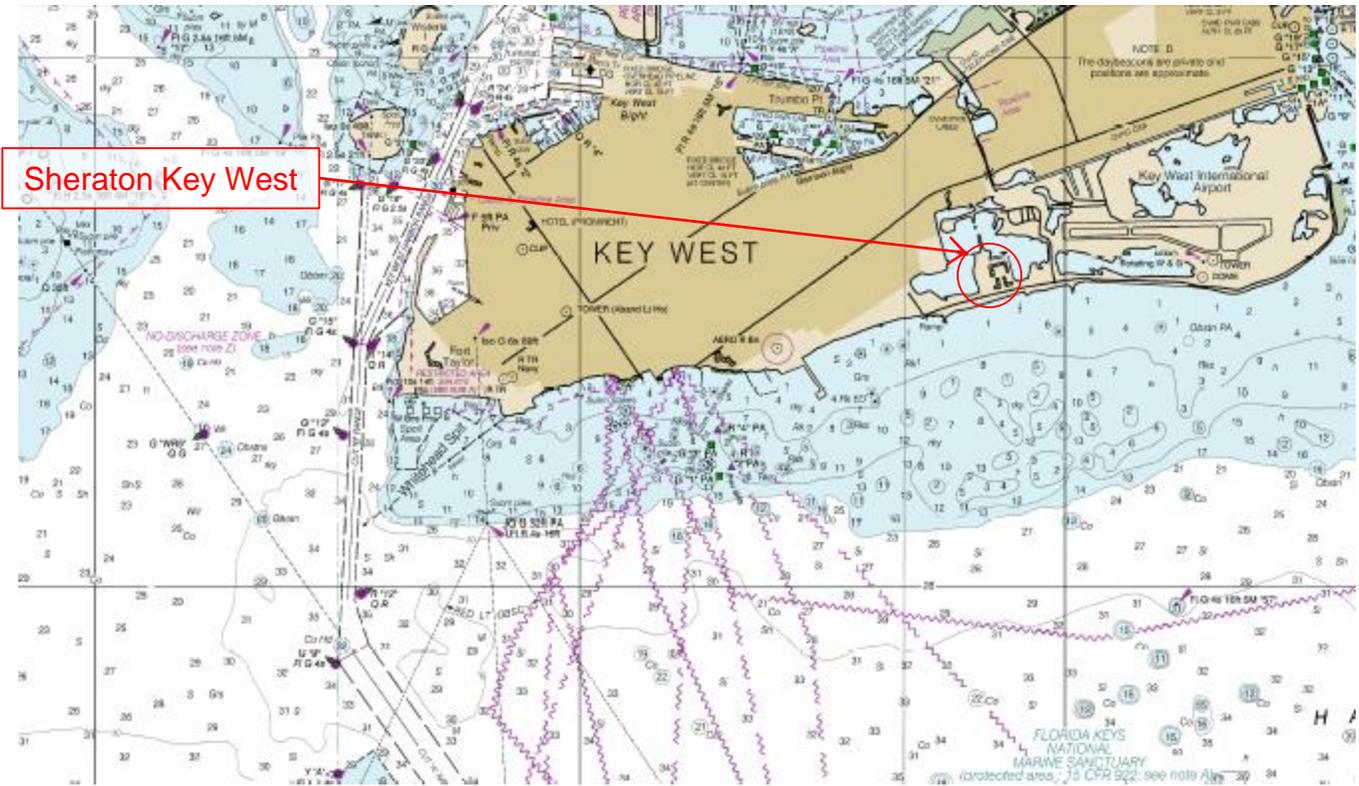


FIGURE 2.5A: EXISTING CONDITIONS – TRANSECT 1



Section 3 - Erosion Analysis

A dune erosion analysis was carried out for the profiles presented in Section 2 as outlined in Section 2.9 of “Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update” published by FEMA, and updated in February 2007. The actual dune seaward of the Project is located below the 100-year storm surge level of +8.5 feet NGVD. Therefore, the erosion analysis was based on concept of dune removal relative to the seaward toe of the dune and in accordance with the guidelines for “dune removal”.

The resulting eroded profiles as illustrated in Figures 3.1A through 3.1C were utilized as input in the WHAFIS wave model as described in Section 4.

FIGURE 3.1A ERODED PROFILE – TRANSECT 1

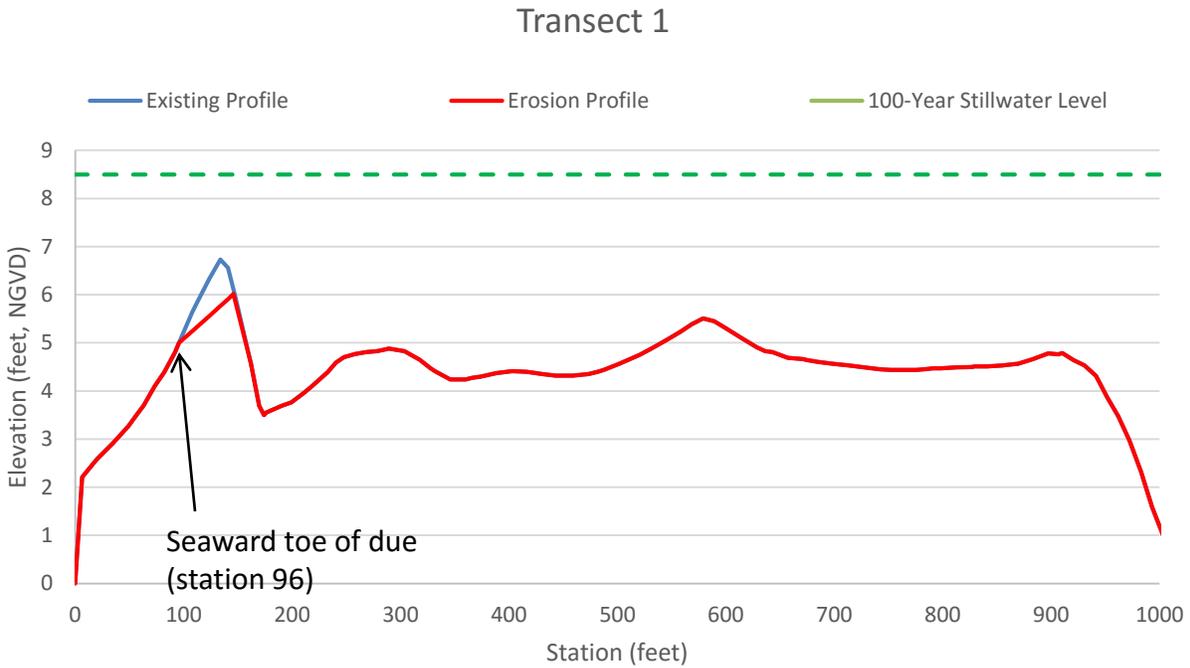
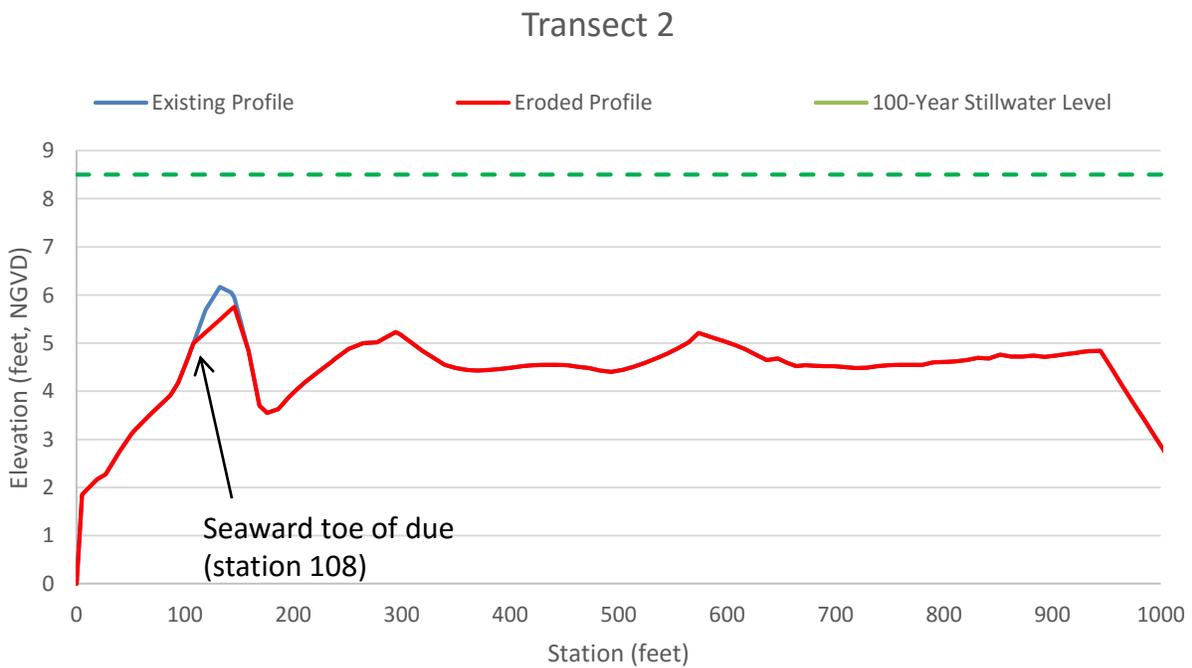


FIGURE 3.1B ERODED PROFILE – TRANSECT 2



Section 4 - Wave Analysis

4.1 General

A wave analysis was conducted based on the eroded profiles, determined and presented in Section 3, utilizing the Coastal Hazard Analysis Modeling Program (CHAMP, version 2.0) developed by FEMA. CHAMP is a Windows based program that allows the user to enter data, perform coastal analyses, visualize and tabulate results, as well as chart summary information for each transect within a graphical interface. The CHAMP model incorporates various modules to provide wave crest elevations based on the 100-year return period storm event for a given transect. For this analysis, the WHAFIS module of CHAMP was used to determine wave heights, wave crest elevations, flood hazard zone designations, and the location of zone boundaries along a given transect. To determine the input conditions for the wave model a statistical analysis was conducted based on offshore wave data.

4.2 Offshore waves

Offshore design waves published by US Army Corps of Engineers as part of the Wave Information Study (WIS) were adopted for the analysis. For a 100-year return period, the wave height for station 63498 was listed as 39.0 feet and with wave period of 12 seconds. Station 63498 is located approximately 7 miles offshore from the Project site in water depths of approximately 450 feet.

4.3 WHAFIS Setup

The site specific input data utilized for the WHAFIS model are described below:

Storm Surge: The 100-year and 500-year return period storm surge elevations were obtained from the FEMA County FIS. The 100-year and 500-year storm surge elevations at transects 4 of +8.5 feet NGVD and +8.7 feet NGVD (including wave setup of 1.3 feet), respectively, were adopted for this study.

Wave Height: The design wave height associated with a 100-year return period storm event immediately seaward of the Project site was conservatively adopted as 21.3 feet (depth limited at the -19 feet NGVD contour assuming a storm surge elevation of 8.5 feet NGVD) and utilized as input into the WHAFIS model. A design wave period of 12 seconds was used.

Wind Speed: The design wind speed for the 100-year storm event was determined from the Coastal Engineering Manual (CEM: Vol. II, Figure II-8-8 and Figure II-8-9), which provides the extreme fastest-mile hurricane wind speed blowing from any direction at 32.8 feet above the ground in open terrain near the coastline for various return periods. The fastest-mile wind speed was converted to a 60-minute average wind speed of 98 mph, because waves develop over time and not instantaneously.

Transects/Eroded Profiles: The eroded profiles described in Section 3 and illustrated in Figure 3.2A and 3.2B were adopted. The transects are located at the eastern, middle and western property limit. The transect starts at elevation 0.0 feet NGVD (for the eroded profile) and extends landward up to the end (northern) limit of the Project site. The WHAFIS model only analyzes transect points that are above an elevation of 0.0 feet NGVD and equal to or below the still water level associated with the 100-year storm event.

4.4 WHAFIS Model Results

The model predicts a significant decrease in the wave height along the transects, as illustrated in Figures 4.2A and 4.2B and presented in tabular format in Appendix C. For both transects the wave height decays from 6.5 feet at the first station (at the zero-contour) to less than 3 feet beyond the eroded dune. Input and output data from the WHAFIS models are presented in Appendix B.

Based on the WHAFIS model results and the site specific survey, the analysis supports a revision of the existing VE-zone designation to an AE11-zone designation for the Project property. A runup analysis was not conducted as the site will be submerged during the 100-year storm.

FIGURE 4.1A: WHAFIS RESULTS – TRANSECT 1

Flood Zone	
Current	VE11
WHAFIS	VE AE10/11

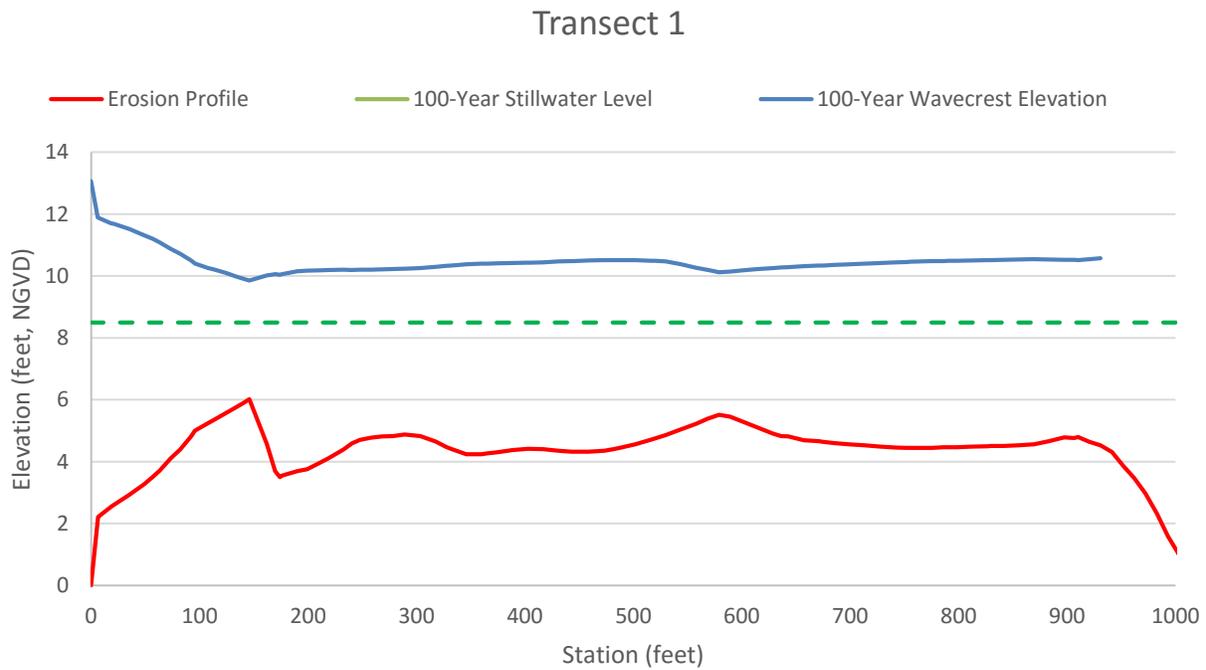
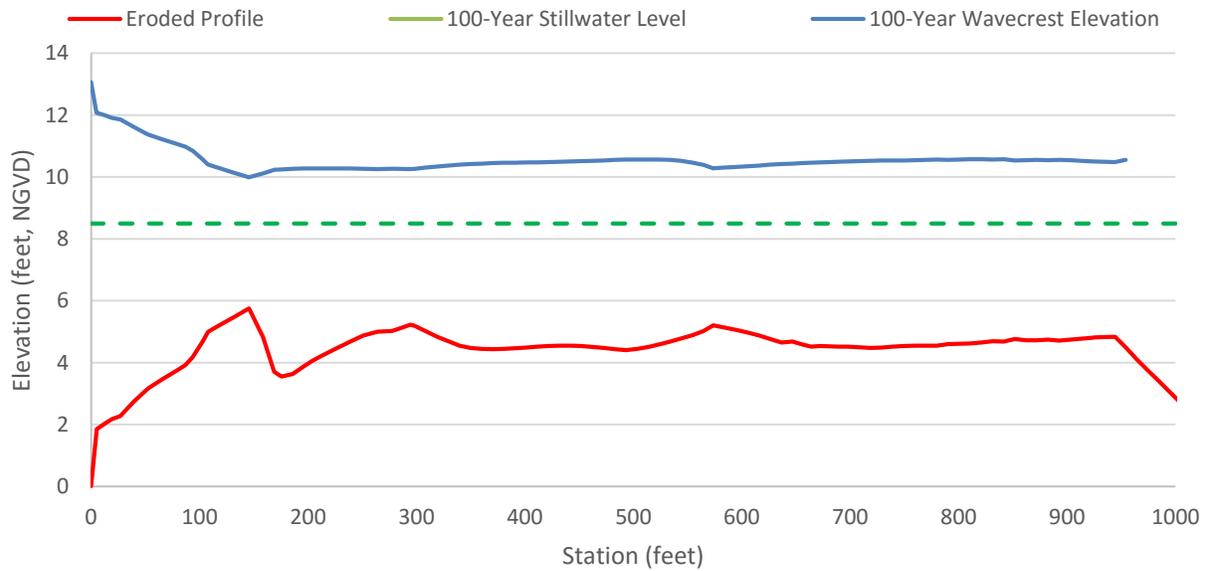


FIGURE 4.1B: WHAFIS RESULTS – TRANSECT 2

Flood Zone	
Current	VE11
WHAFIS	VE AE10/11

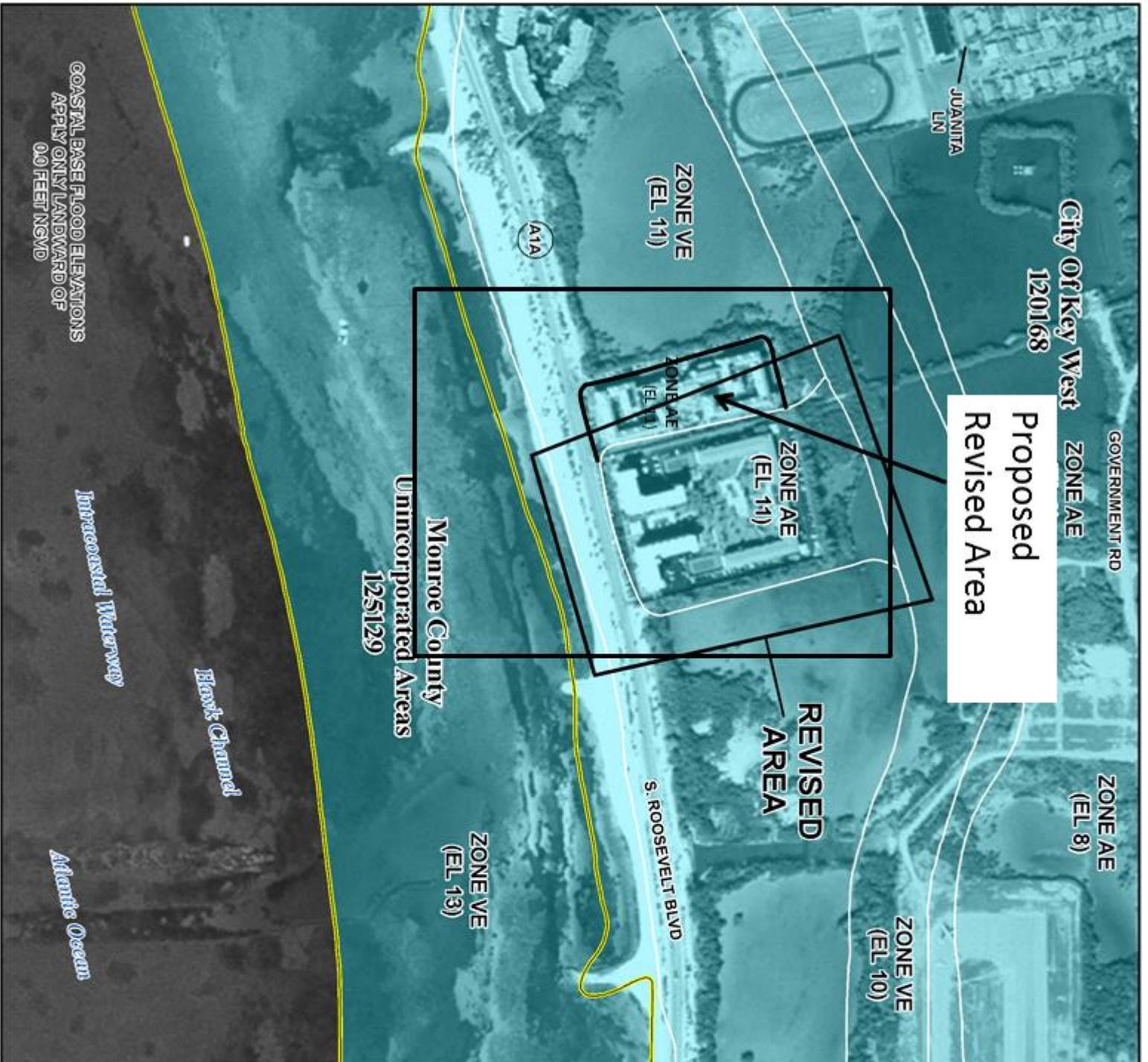
Transect 2



Section 5 - Proposed Flood Map Modification

The erosion and wave results presented in Sections 3 and 4 supports a change of the flood zone designation at the Project site. Based on the site specific survey and the coastal engineering analyses, a modification of the existing VE11 zone designation to AE11 is supported.

Based on the WHAFIS modeling results along with the location of the landward heel of the primary frontal dune, a proposed flood map revision was developed as illustrated in Figure 5.1 and Drawing C-1 in Appendix C. The new zoning are based on the stationing (relative to the 0-contour of the eroded profile) provided in the WHAFIS results in Appendix B



Proposed Revised Area

REVISED AREA

Key West International Airport

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) with BFE or Depth. Zone AE, AO, AH, VE, AR. Regulatory Floodway.
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile. Zone X.
- Future Conditions 1% Annual Chance Flood Hazard. Zone X.
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X.

OTHER AREAS OF FLOOD HAZARD

- Zone X
- Zone X
- Zone X

SCALE

Map Projection:
 North Arrow: Northern Hemisphere, Vertical Datum: NAVD83
 1 inch = 500 feet
 1:6,000
 Scale bar: 0, 250, 500, 1,000, 1,500, 2,000 feet / 0, 75, 150, 300 meters

FEMA National Flood Insurance Program

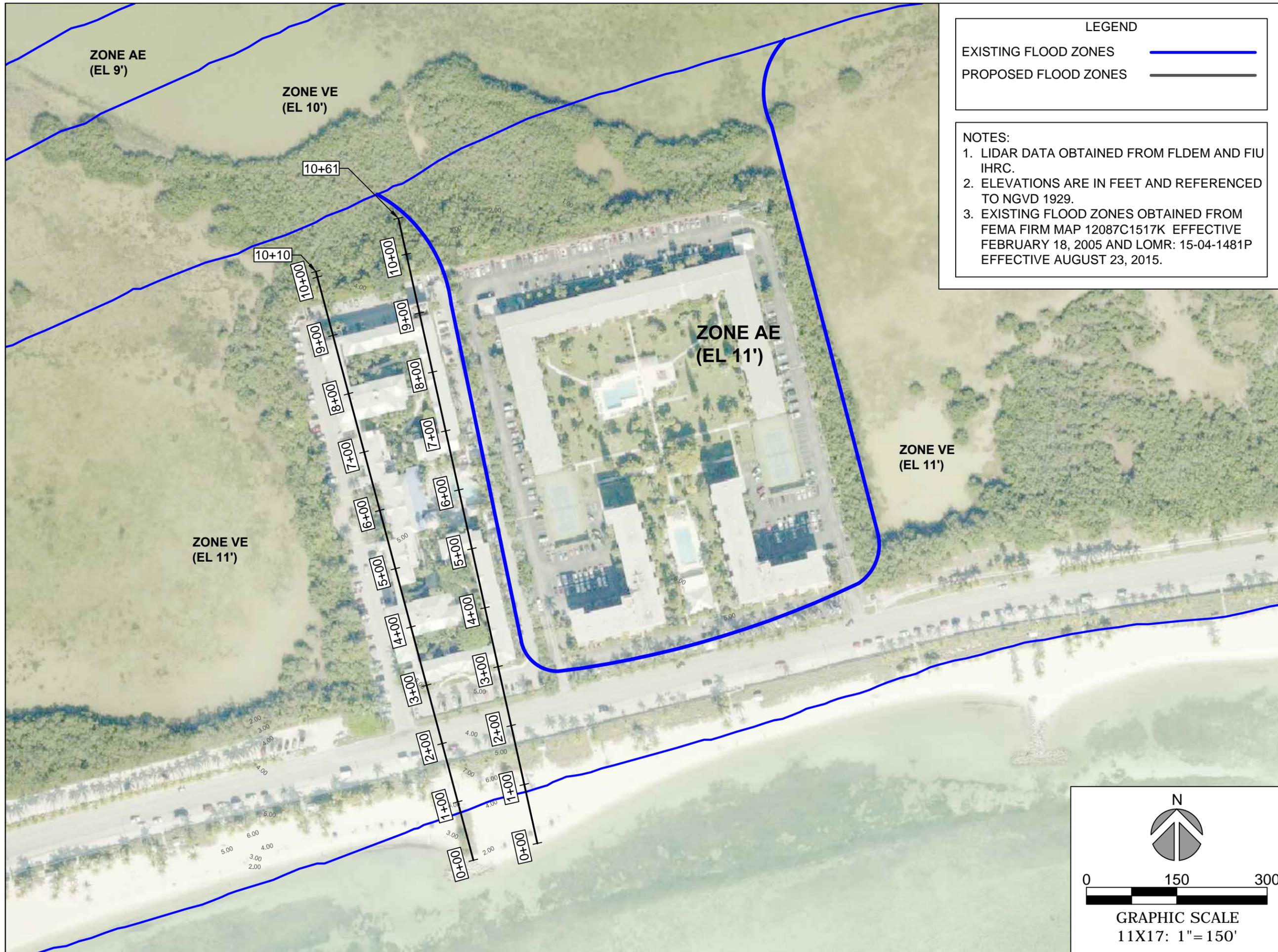
NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP
 MONROE COUNTY, FLORIDA
 And Incorporated Areas
 PANEL 1517 of 1585

Panel Contains:
 COMMUNITY NUMBER PANEL SUFFIX
 KEY WEST CITY 120168 K
 MONROE COUNTY 125129 K

VERSION NUMBER 1.1.0
 MAP NUMBER 12087C1517K
 EFFECTIVE DATE FEBRUARY 18, 2005

Appendix A

Survey



LEGEND	
EXISTING FLOOD ZONES	
PROPOSED FLOOD ZONES	

NOTES:

- LIDAR DATA OBTAINED FROM FLDEM AND FIU IHRC.
- ELEVATIONS ARE IN FEET AND REFERENCED TO NGVD 1929.
- EXISTING FLOOD ZONES OBTAINED FROM FEMA FIRM MAP 12087C1517K EFFECTIVE FEBRUARY 18, 2005 AND LOMR: 15-04-1481P EFFECTIVE AUGUST 23, 2015.

PROJECT
SHERATON KEY WEST LOMR
 2001 S ROOSEVELT BLVD
 KEY WEST, FL 33040

CLIENT
DIAMOND ROCK HOSPITALITY CO.
 2001 S ROOSEVELT BLVD
 KEY WEST, FL 33040

ENGINEER
CUMMINS CEDERBERG, INC.
 7550 RED ROAD, SUITE 217
 SOUTH MIAMI, FLORIDA 33143
 T: +1 305-741-6155 F: +1 305-974-1969
 WWW.CUMMINSCEDERBERG.COM
 COA # 29062

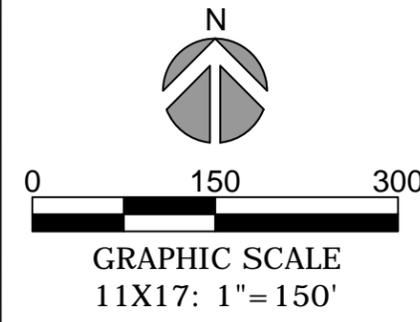
SEAL
 JANNEK CEDERBERG, P.E. 69839

ISSUE	DATE	DRAWING SUBMITTAL	SUBMISSION / REVISION
1	2/3/2015		

PROJECT NO. 35300
 DRAWN LBA
 CHECKED JAC
 SCALE AS SHOWN

SHEET TITLE
EXISTING CONDITIONS

SHEET 1 OF 1
A



Appendix B

WHAFIS Output

w1

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)

Executed on: Sun Mar 6 16:43:17 2016

Input file: C:\Users\Jannek\Desktop\CHAMP\CHAMP - Sheraton Key West\Sheraton\w1.dat

Output file: C:\Users\Jannek\Desktop\CHAMP\CHAMP - Sheraton Key West\Sheraton\w1.out

- Transect: 1 Date: 3/6/2016

THIS IS A 100-YEAR CASE

THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 98.00 WINDOF 80.00 WINDVH 60.00

PART1 INPUT

0.368	IE	0.000	0.000	100.000	3.000	8.500	31.800	12.000	98.000
		0.000							
0.141	IF	6.000	2.210	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.025	IF	18.000	2.540	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.022	IF	21.000	2.590	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.024	IF	35.000	2.910	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.027	IF	49.000	3.270	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.031	IF	57.000	3.510	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.037	IF	63.000	3.700	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
	IF	73.000	4.100	0.000	8.500	0.000	0.000	0.000	0.000

				w1					
0.036	0.000								
	IF	82.000	4.390	0.000	8.500	0.000	0.000	0.000	0.000
0.037	0.000								
	IF	92.000	4.810	0.000	8.500	0.000	0.000	0.000	0.000
0.044	0.000								
	IF	96.000	5.000	0.000	8.500	0.000	0.000	0.000	0.000
0.027	0.000								
	IF	108.000	5.250	0.000	8.500	0.000	0.000	0.000	0.000
0.021	0.000								
	IF	113.000	5.350	0.000	8.500	0.000	0.000	0.000	0.000
0.019	0.000								
	IF	124.000	5.560	0.000	8.500	0.000	0.000	0.000	0.000
0.020	0.000								
	IF	134.000	5.770	0.000	8.500	0.000	0.000	0.000	0.000
0.021	0.000								
	IF	141.000	5.910	0.000	8.500	0.000	0.000	0.000	0.000
0.021	0.000								
	IF	146.000	6.020	0.000	8.500	0.000	0.000	0.000	0.000
-0.064	0.000								
	IF	162.000	4.570	0.000	8.500	0.000	0.000	0.000	0.000
-0.097	0.000								
	IF	170.000	3.690	0.000	8.500	0.000	0.000	0.000	0.000
-0.089	0.000								
	IF	174.000	3.500	0.000	8.500	0.000	0.000	0.000	0.000
-0.023	0.000								
	IF	176.000	3.550	0.000	8.500	0.000	0.000	0.000	0.000
0.012	0.000								
	IF	190.000	3.690	0.000	8.500	0.000	0.000	0.000	0.000
0.009	0.000								
	IF	199.000	3.760	0.000	8.500	0.000	0.000	0.000	0.000
0.013	0.000								
	IF	211.000	3.970	0.000	8.500	0.000	0.000	0.000	0.000
0.018	0.000								
	IF	219.000	4.110	0.000	8.500	0.000	0.000	0.000	0.000
0.019	0.000								
	IF	233.000	4.390	0.000	8.500	0.000	0.000	0.000	0.000

				w1					
0.023	0.000								
	IF	240.000	4.590	0.000	8.500	0.000	0.000	0.000	0.000
0.021	0.000								
	IF	248.000	4.700	0.000	8.500	0.000	0.000	0.000	0.000
0.010	0.000								
	IF	258.000	4.770	0.000	8.500	0.000	0.000	0.000	0.000
0.005	0.000								
	IF	268.000	4.810	0.000	8.500	0.000	0.000	0.000	0.000
0.003	0.000								
	IF	278.000	4.830	0.000	8.500	0.000	0.000	0.000	0.000
0.003	0.000								
	IF	287.000	4.870	0.000	8.500	0.000	0.000	0.000	0.000
0.004	0.000								
	IF	289.000	4.880	0.000	8.500	0.000	0.000	0.000	0.000
-0.002	0.000								
	IF	303.000	4.830	0.000	8.500	0.000	0.000	0.000	0.000
-0.008	0.000								
	IF	318.000	4.650	0.000	8.500	0.000	0.000	0.000	0.000
-0.015	0.000								
	IF	327.000	4.480	0.000	8.500	0.000	0.000	0.000	0.000
-0.017	0.000								
	IF	332.000	4.410	0.000	8.500	0.000	0.000	0.000	0.000
-0.013	0.000								
	IF	346.000	4.240	0.000	8.500	0.000	0.000	0.000	0.000
-0.006	0.000								
	IF	360.000	4.240	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	366.000	4.270	0.000	8.500	0.000	0.000	0.000	0.000
0.004	0.000								
	IF	374.000	4.300	0.000	8.500	0.000	0.000	0.000	0.000
0.004	0.000								
	IF	388.000	4.370	0.000	8.500	0.000	0.000	0.000	0.000
0.004	0.000								
	IF	402.000	4.410	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	405.000	4.410	0.000	8.500	0.000	0.000	0.000	0.000

				w1					
-0.001	0.000								
	IF	417.000	4.400	0.000	8.500	0.000	0.000	0.000	0.000
-0.002	0.000								
	IF	431.000	4.350	0.000	8.500	0.000	0.000	0.000	0.000
-0.003	0.000								
	IF	443.000	4.320	0.000	8.500	0.000	0.000	0.000	0.000
-0.002	0.000								
	IF	445.000	4.320	0.000	8.500	0.000	0.000	0.000	0.000
0.000	0.000								
	IF	459.000	4.320	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	473.000	4.350	0.000	8.500	0.000	0.000	0.000	0.000
0.004	0.000								
	IF	482.000	4.400	0.000	8.500	0.000	0.000	0.000	0.000
0.006	0.000								
	IF	487.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000
0.008	0.000								
	IF	502.000	4.560	0.000	8.500	0.000	0.000	0.000	0.000
0.009	0.000								
	IF	516.000	4.700	0.000	8.500	0.000	0.000	0.000	0.000
0.011	0.000								
	IF	520.000	4.750	0.000	8.500	0.000	0.000	0.000	0.000
0.011	0.000								
	IF	530.000	4.860	0.000	8.500	0.000	0.000	0.000	0.000
0.012	0.000								
	IF	544.000	5.040	0.000	8.500	0.000	0.000	0.000	0.000
0.013	0.000								
	IF	558.000	5.230	0.000	8.500	0.000	0.000	0.000	0.000
0.014	0.000								
	IF	569.000	5.390	0.000	8.500	0.000	0.000	0.000	0.000
0.014	0.000								
	IF	572.000	5.430	0.000	8.500	0.000	0.000	0.000	0.000
0.012	0.000								
	IF	579.000	5.510	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	589.000	5.450	0.000	8.500	0.000	0.000	0.000	0.000

				w1					
-0.009	0.000								
	IF	601.000	5.300	0.000	8.500	0.000	0.000	0.000	0.000
-0.014	0.000								
	IF	615.000	5.100	0.000	8.500	0.000	0.000	0.000	0.000
-0.014	0.000								
	IF	629.000	4.910	0.000	8.500	0.000	0.000	0.000	0.000
-0.013	0.000								
	IF	636.000	4.830	0.000	8.500	0.000	0.000	0.000	0.000
-0.007	0.000								
	IF	643.000	4.810	0.000	8.500	0.000	0.000	0.000	0.000
-0.007	0.000								
	IF	657.000	4.690	0.000	8.500	0.000	0.000	0.000	0.000
-0.005	0.000								
	IF	671.000	4.660	0.000	8.500	0.000	0.000	0.000	0.000
-0.003	0.000								
	IF	675.000	4.640	0.000	8.500	0.000	0.000	0.000	0.000
-0.004	0.000								
	IF	685.000	4.600	0.000	8.500	0.000	0.000	0.000	0.000
-0.003	0.000								
	IF	700.000	4.560	0.000	8.500	0.000	0.000	0.000	0.000
-0.002	0.000								
	IF	713.000	4.530	0.000	8.500	0.000	0.000	0.000	0.000
-0.002	0.000								
	IF	714.000	4.530	0.000	8.500	0.000	0.000	0.000	0.000
-0.003	0.000								
	IF	728.000	4.490	0.000	8.500	0.000	0.000	0.000	0.000
-0.003	0.000								
	IF	742.000	4.450	0.000	8.500	0.000	0.000	0.000	0.000
-0.002	0.000								
	IF	752.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000
-0.001	0.000								
	IF	755.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000
0.000	0.000								
	IF	765.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000
0.000	0.000								
	IF	776.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000

				w1					
0.001	0.000								
	IF	786.000	4.460	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	791.000	4.470	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	799.000	4.470	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	813.000	4.490	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	827.000	4.500	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	829.000	4.510	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	841.000	4.510	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	855.000	4.530	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	868.000	4.560	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	869.000	4.560	0.000	8.500	0.000	0.000	0.000	0.000
0.007	0.000								
	IF	883.000	4.660	0.000	8.500	0.000	0.000	0.000	0.000
0.008	0.000								
	IF	898.000	4.780	0.000	8.500	0.000	0.000	0.000	0.000
0.004	0.000								
	IF	907.000	4.760	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	910.000	4.790	0.000	8.500	0.000	0.000	0.000	0.000
-0.009	0.000								
	IF	921.000	4.640	0.000	8.500	0.000	0.000	0.000	0.000
-0.012	0.000								
	IF	931.000	4.530	0.000	8.500	0.000	0.000	0.000	0.000
-0.011	0.000								
	ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000								

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AVERAGE	END	END	FETCH	SURGE	ELEV	SURGE	ELEV	INITIAL	INITIAL	BOTTOM
A-ZONES	STATION	ELEVATION	LENGTH	10-YEAR	100-YEAR	WAVE	HEIGHT	W. PERIOD		SLOPE
IE 0.000	0.000	0.000	100.000	3.000	8.500	31.800	12.000	98.000		0.368

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	6.000	2.210	0.000	8.500	0.000	0.000	0.000	0.000	0.141

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	18.000	2.540	0.000	8.500	0.000	0.000	0.000	0.000	0.025

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	21.000	2.590	0.000	8.500	0.000	0.000	0.000	0.000	0.022

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
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					w1					
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF		35.000	2.910	0.000	8.500	0.000	0.000	0.000	0.000	0.024
0.000										
AVERAGE		END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF		49.000	3.270	0.000	8.500	0.000	0.000	0.000	0.000	0.027
0.000										
AVERAGE		END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF		57.000	3.510	0.000	8.500	0.000	0.000	0.000	0.000	0.031
0.000										
AVERAGE		END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF		63.000	3.700	0.000	8.500	0.000	0.000	0.000	0.000	0.037
0.000										
AVERAGE		END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF		73.000	4.100	0.000	8.500	0.000	0.000	0.000	0.000	0.036
0.000										

w1

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	82.000	4.390	0.000	8.500	0.000	0.000	0.000	0.000	0.037

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	92.000	4.810	0.000	8.500	0.000	0.000	0.000	0.000	0.044

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	96.000	5.000	0.000	8.500	0.000	0.000	0.000	0.000	0.027

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	108.000	5.250	0.000	8.500	0.000	0.000	0.000	0.000	0.021

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
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					w1				
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	113.000	5.350	0.000	8.500	0.000	0.000	0.000	0.000	0.019
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	124.000	5.560	0.000	8.500	0.000	0.000	0.000	0.000	0.020
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	134.000	5.770	0.000	8.500	0.000	0.000	0.000	0.000	0.021
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	141.000	5.910	0.000	8.500	0.000	0.000	0.000	0.000	0.021
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	146.000	6.020	0.000	8.500	0.000	0.000	0.000	0.000	-0.064

w1

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	162.000	4.570	0.000	8.500	0.000	0.000	0.000	0.000	-0.097

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	170.000	3.690	0.000	8.500	0.000	0.000	0.000	0.000	-0.089

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	174.000	3.500	0.000	8.500	0.000	0.000	0.000	0.000	-0.023

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	176.000	3.550	0.000	8.500	0.000	0.000	0.000	0.000	0.012

	END	END	NEW SURGE	NEW SURGE					BOTTOM
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					w1				
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		190.000	3.690	0.000	8.500	0.000	0.000	0.000	0.009
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		199.000	3.760	0.000	8.500	0.000	0.000	0.000	0.013
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		211.000	3.970	0.000	8.500	0.000	0.000	0.000	0.018
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		219.000	4.110	0.000	8.500	0.000	0.000	0.000	0.019
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		233.000	4.390	0.000	8.500	0.000	0.000	0.000	0.023
0.000									

w1

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	240.000	4.590	0.000	8.500	0.000	0.000	0.000	0.000	0.021

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	248.000	4.700	0.000	8.500	0.000	0.000	0.000	0.000	0.010

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	258.000	4.770	0.000	8.500	0.000	0.000	0.000	0.000	0.005

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	268.000	4.810	0.000	8.500	0.000	0.000	0.000	0.000	0.003

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
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					w1				
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		278.000	4.830	0.000	8.500	0.000	0.000	0.000	0.003
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		287.000	4.870	0.000	8.500	0.000	0.000	0.000	0.004
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		289.000	4.880	0.000	8.500	0.000	0.000	0.000	-0.002
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		303.000	4.830	0.000	8.500	0.000	0.000	0.000	-0.008
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		318.000	4.650	0.000	8.500	0.000	0.000	0.000	-0.015
0.000									

w1

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	327.000	4.480	0.000	8.500	0.000	0.000	0.000	0.000	-0.017

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	332.000	4.410	0.000	8.500	0.000	0.000	0.000	0.000	-0.013

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	346.000	4.240	0.000	8.500	0.000	0.000	0.000	0.000	-0.006

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	360.000	4.240	0.000	8.500	0.000	0.000	0.000	0.000	0.002

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE									

					w1				
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		366.000	4.270	0.000	8.500	0.000	0.000	0.000	0.004
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		374.000	4.300	0.000	8.500	0.000	0.000	0.000	0.004
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		388.000	4.370	0.000	8.500	0.000	0.000	0.000	0.004
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		402.000	4.410	0.000	8.500	0.000	0.000	0.000	0.002
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		405.000	4.410	0.000	8.500	0.000	0.000	0.000	-0.001
0.000									

w1

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	417.000	4.400	0.000	8.500	0.000	0.000	0.000	0.000	-0.002

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	431.000	4.350	0.000	8.500	0.000	0.000	0.000	0.000	-0.003

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	443.000	4.320	0.000	8.500	0.000	0.000	0.000	0.000	-0.002

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	445.000	4.320	0.000	8.500	0.000	0.000	0.000	0.000	0.000

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
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					w1				
		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
A-ZONES	IF	459.000	4.320	0.000	8.500	0.000	0.000	0.000	0.001
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
A-ZONES	IF	473.000	4.350	0.000	8.500	0.000	0.000	0.000	0.004
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
A-ZONES	IF	482.000	4.400	0.000	8.500	0.000	0.000	0.000	0.006
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
A-ZONES	IF	487.000	4.440	0.000	8.500	0.000	0.000	0.000	0.008
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
A-ZONES	IF	502.000	4.560	0.000	8.500	0.000	0.000	0.000	0.009
0.000									

w1

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	516.000	4.700	0.000	8.500	0.000	0.000	0.000	0.000	0.011

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	520.000	4.750	0.000	8.500	0.000	0.000	0.000	0.000	0.011

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	530.000	4.860	0.000	8.500	0.000	0.000	0.000	0.000	0.012

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	544.000	5.040	0.000	8.500	0.000	0.000	0.000	0.000	0.013

	END	END	NEW SURGE	NEW SURGE					BOTTOM
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					w1				
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	558.000	5.230	0.000	8.500	0.000	0.000	0.000	0.000	0.014
AVERAGE									
	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	569.000	5.390	0.000	8.500	0.000	0.000	0.000	0.000	0.014
AVERAGE									
	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	572.000	5.430	0.000	8.500	0.000	0.000	0.000	0.000	0.012
AVERAGE									
	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	579.000	5.510	0.000	8.500	0.000	0.000	0.000	0.000	0.001
AVERAGE									
	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	589.000	5.450	0.000	8.500	0.000	0.000	0.000	0.000	-0.009

w1

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	601.000	5.300	0.000	8.500	0.000	0.000	0.000	0.000	-0.014

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	615.000	5.100	0.000	8.500	0.000	0.000	0.000	0.000	-0.014

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	629.000	4.910	0.000	8.500	0.000	0.000	0.000	0.000	-0.013

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	636.000	4.830	0.000	8.500	0.000	0.000	0.000	0.000	-0.007

	END	END	NEW SURGE	NEW SURGE					BOTTOM
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					w1				
A-ZONES									
IF									
0.000									
STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	
643.000	4.810	0.000	8.500	0.000	0.000	0.000	0.000	-0.007	
AVERAGE									
END	END	NEW SURGE	NEW SURGE					BOTTOM	
STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	
657.000	4.690	0.000	8.500	0.000	0.000	0.000	0.000	-0.005	
AVERAGE									
END	END	NEW SURGE	NEW SURGE					BOTTOM	
STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	
671.000	4.660	0.000	8.500	0.000	0.000	0.000	0.000	-0.003	
AVERAGE									
END	END	NEW SURGE	NEW SURGE					BOTTOM	
STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	
675.000	4.640	0.000	8.500	0.000	0.000	0.000	0.000	-0.004	
AVERAGE									
END	END	NEW SURGE	NEW SURGE					BOTTOM	
STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE	
685.000	4.600	0.000	8.500	0.000	0.000	0.000	0.000	-0.003	

w1

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF	700.000	4.560	0.000	8.500	0.000	0.000	0.000	0.000	-0.002
0.000									

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF	713.000	4.530	0.000	8.500	0.000	0.000	0.000	0.000	-0.002
0.000									

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF	714.000	4.530	0.000	8.500	0.000	0.000	0.000	0.000	-0.003
0.000									

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF	728.000	4.490	0.000	8.500	0.000	0.000	0.000	0.000	-0.003
0.000									

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
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					w1					
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE	
IF		742.000	4.450	0.000	8.500	0.000	0.000	0.000	0.000	-0.002
0.000										
AVERAGE		END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF		752.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000	-0.001
0.000										
AVERAGE		END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF		755.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000	0.000
0.000										
AVERAGE		END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF		765.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000	0.000
0.000										
AVERAGE		END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF		776.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000	0.001
0.000										

w1

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	786.000	4.460	0.000	8.500	0.000	0.000	0.000	0.000	0.002

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	791.000	4.470	0.000	8.500	0.000	0.000	0.000	0.000	0.001

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	799.000	4.470	0.000	8.500	0.000	0.000	0.000	0.000	0.001

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	813.000	4.490	0.000	8.500	0.000	0.000	0.000	0.000	0.001

AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
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					w1				
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		827.000	4.500	0.000	8.500	0.000	0.000	0.000	0.001
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		829.000	4.510	0.000	8.500	0.000	0.000	0.000	0.001
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		841.000	4.510	0.000	8.500	0.000	0.000	0.000	0.001
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		855.000	4.530	0.000	8.500	0.000	0.000	0.000	0.002
0.000									
AVERAGE		END	END	NEW SURGE	NEW SURGE				BOTTOM
A-ZONES		STATION	ELEVATION	10-YEAR	100-YEAR				SLOPE
IF		868.000	4.560	0.000	8.500	0.000	0.000	0.000	0.002
0.000									

w1

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	869.000	4.560	0.000	8.500	0.000	0.000	0.000	0.000	0.007

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	883.000	4.660	0.000	8.500	0.000	0.000	0.000	0.000	0.008

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	898.000	4.780	0.000	8.500	0.000	0.000	0.000	0.000	0.004

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES IF 0.000	907.000	4.760	0.000	8.500	0.000	0.000	0.000	0.000	0.001

	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE									

		STATION	ELEVATION	10-YEAR	100-YEAR	w1				SLOPE
A-ZONES	IF	910.000	4.790	0.000	8.500	0.000	0.000	0.000	0.000	-0.009
		0.000								
AVERAGE		END	END	NEW SURGE	NEW SURGE					BOTTOM
		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	921.000	4.640	0.000	8.500	0.000	0.000	0.000	0.000	-0.012
		0.000								
AVERAGE		END	END	NEW SURGE	NEW SURGE					BOTTOM
		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	931.000	4.530	0.000	8.500	0.000	0.000	0.000	0.000	-0.011
		0.000								

-----END OF
TRANSECT-----

NOTE:

SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

1

PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL
PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

	LOCATION	w1 CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE	0.00	6.51	12.00	13.06
IF	6.00	4.84	12.00	11.89
IF	18.00	4.59	12.00	11.71
IF	21.00	4.55	12.00	11.69
IF	35.00	4.31	12.00	11.52
IF	49.00	4.03	12.00	11.32
IF	57.00	3.85	12.00	11.20
IF	63.00	3.71	12.00	11.09
IF	73.00	3.40	12.00	10.88
IF	82.00	3.18	12.00	10.72
IF	92.00	2.86	12.00	10.50
IF	96.00	2.71	12.00	10.40
IF	108.00	2.52	12.00	10.26
IF	113.00	2.44	12.00	10.21
IF	124.00	2.28	12.00	10.10
IF	134.00	2.12	12.00	9.98
IF	141.00	2.01	12.00	9.91

w1

IF	146.00	1.92	12.00	9.85
IF	162.00	2.18	12.00	10.02
IF	170.00	2.23	12.00	10.06
IF	174.00	2.21	12.00	10.04
IF	176.00	2.23	12.00	10.06
IF	190.00	2.35	12.00	10.15
IF	199.00	2.38	12.00	10.17
IF	211.00	2.41	12.00	10.18
IF	219.00	2.42	12.00	10.19
IF	233.00	2.43	12.00	10.20
IF	240.00	2.42	12.00	10.19
IF	248.00	2.42	12.00	10.20
IF	258.00	2.43	12.00	10.20
IF	268.00	2.45	12.00	10.21
IF	278.00	2.46	12.00	10.22
IF	287.00	2.47	12.00	10.23
IF	289.00	2.48	12.00	10.23
IF	303.00	2.51	12.00	10.26

w1

IF	318.00	2.57	12.00	10.30
IF	327.00	2.61	12.00	10.33
IF	332.00	2.63	12.00	10.34
IF	346.00	2.68	12.00	10.38
IF	360.00	2.71	12.00	10.40
IF	366.00	2.71	12.00	10.40
IF	374.00	2.72	12.00	10.41
IF	388.00	2.74	12.00	10.42
IF	402.00	2.75	12.00	10.43
IF	405.00	2.76	12.00	10.43
IF	417.00	2.78	12.00	10.44
IF	431.00	2.81	12.00	10.47
IF	443.00	2.83	12.00	10.48
IF	445.00	2.83	12.00	10.48
IF	459.00	2.85	12.00	10.50
IF	473.00	2.87	12.00	10.51
IF	482.00	2.87	12.00	10.51
IF	487.00	2.87	12.00	10.51

w1

IF	502.00	2.86	12.00	10.51
IF	516.00	2.85	12.00	10.49
IF	520.00	2.84	12.00	10.49
IF	530.00	2.82	12.00	10.47
IF	544.00	2.68	12.00	10.38
IF	558.00	2.53	12.00	10.27
IF	569.00	2.41	12.00	10.19
IF	572.00	2.38	12.00	10.17
IF	579.00	2.32	12.00	10.12
IF	589.00	2.34	12.00	10.14
IF	601.00	2.39	12.00	10.18
IF	615.00	2.45	12.00	10.22
IF	629.00	2.51	12.00	10.26
IF	636.00	2.54	12.00	10.28
IF	643.00	2.55	12.00	10.29
IF	657.00	2.60	12.00	10.32
IF	671.00	2.62	12.00	10.34
IF	675.00	2.64	12.00	10.34

w1

IF	685.00	2.66	12.00	10.36
IF	700.00	2.69	12.00	10.38
IF	713.00	2.71	12.00	10.40
IF	714.00	2.72	12.00	10.40
IF	728.00	2.74	12.00	10.42
IF	742.00	2.77	12.00	10.44
IF	752.00	2.79	12.00	10.45
IF	755.00	2.79	12.00	10.46
IF	765.00	2.81	12.00	10.47
IF	776.00	2.82	12.00	10.48
IF	786.00	2.83	12.00	10.48
IF	791.00	2.84	12.00	10.49
IF	799.00	2.85	12.00	10.49
IF	813.00	2.86	12.00	10.50
IF	827.00	2.88	12.00	10.51
IF	829.00	2.88	12.00	10.51
IF	841.00	2.89	12.00	10.52
IF	855.00	2.90	12.00	10.53

w1

IF	868.00	2.91	12.00	10.54
IF	869.00	2.91	12.00	10.54
IF	883.00	2.90	12.00	10.53
IF	898.00	2.88	12.00	10.52
IF	907.00	2.89	12.00	10.52
IF	910.00	2.87	12.00	10.51
IF	921.00	2.92	12.00	10.54
IF	931.00	2.95	12.00	10.57

TRANSMITTED WAVE HEIGHT AT LAST FETCH OR OBSTRUCTION = 2.95 WHICH EXCEEDS 0.5.

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

NO AREAS ABOVE 100-YEAR SURGE IN THIS TRANSECT

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
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NO SURGE CHANGES IN THIS TRANSECT

PART5 LOCATION OF V ZONES

w1

		A15	EL=10	75
807.67	10.50			
		A15	EL=11	75
931.00	10.57			

ZONE TERMINATED AT END OF TRANSECT

PART 7 POSTSCRIPT NOTES

w2

WAVE HEIGHT COMPUTATIONS FOR FLOOD INSURANCE STUDIES (WHAFIS VERSION 4.0G, 08_2007)

Executed on: Sun Mar 6 16:45:15 2016

Input file: C:\Users\Jannek\Desktop\CHAMP\CHAMP - Sheraton Key West\Sheraton\w2.dat

Output file: C:\Users\Jannek\Desktop\CHAMP\CHAMP - Sheraton Key West\Sheraton\w2.out

- Transect: 2 Date: 3/6/2016

THIS IS A 100-YEAR CASE

THE FOLLOWING NON-DEFAULT WIND SPEEDS ARE BEING USED
WINDIF 98.00 WINDOF 80.00 WINDVH 60.00

PART1 INPUT

0.370	IE	0.000	0.000	100.000	3.000	8.500	31.800	12.000	98.000
		0.000							
0.168	IF	5.000	1.850	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.023	IF	12.000	2.010	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.017	IF	19.000	2.170	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.028	IF	27.000	2.270	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.035	IF	40.000	2.750	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.033	IF	51.000	3.120	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
0.024	IF	53.000	3.180	0.000	8.500	0.000	0.000	0.000	0.000
		0.000							
	IF	66.000	3.480	0.000	8.500	0.000	0.000	0.000	0.000

				w2					
0.022	0.000								
	IF	80.000	3.760	0.000	8.500	0.000	0.000	0.000	0.000
0.021	0.000								
	IF	87.000	3.920	0.000	8.500	0.000	0.000	0.000	0.000
0.030	0.000								
	IF	94.000	4.180	0.000	8.500	0.000	0.000	0.000	0.000
0.048	0.000								
	IF	103.000	4.690	0.000	8.500	0.000	0.000	0.000	0.000
0.058	0.000								
	IF	106.000	4.880	0.000	8.500	0.000	0.000	0.000	0.000
0.062	0.000								
	IF	108.000	5.000	0.000	8.500	0.000	0.000	0.000	0.000
0.026	0.000								
	IF	119.000	5.220	0.000	8.500	0.000	0.000	0.000	0.000
0.020	0.000								
	IF	132.000	5.490	0.000	8.500	0.000	0.000	0.000	0.000
0.020	0.000								
	IF	143.000	5.700	0.000	8.500	0.000	0.000	0.000	0.000
0.020	0.000								
	IF	145.000	5.750	0.000	8.500	0.000	0.000	0.000	0.000
-0.054	0.000								
	IF	159.000	4.830	0.000	8.500	0.000	0.000	0.000	0.000
-0.085	0.000								
	IF	169.000	3.700	0.000	8.500	0.000	0.000	0.000	0.000
-0.075	0.000								
	IF	176.000	3.550	0.000	8.500	0.000	0.000	0.000	0.000
-0.004	0.000								
	IF	186.000	3.630	0.000	8.500	0.000	0.000	0.000	0.000
0.016	0.000								
	IF	196.000	3.880	0.000	8.500	0.000	0.000	0.000	0.000
0.023	0.000								
	IF	204.000	4.050	0.000	8.500	0.000	0.000	0.000	0.000
0.021	0.000								
	IF	211.000	4.200	0.000	8.500	0.000	0.000	0.000	0.000
0.018	0.000								
	IF	225.000	4.430	0.000	8.500	0.000	0.000	0.000	0.000

				w2					
0.017	0.000								
	IF	235.000	4.610	0.000	8.500	0.000	0.000	0.000	0.000
0.018	0.000								
	IF	238.000	4.660	0.000	8.500	0.000	0.000	0.000	0.000
0.017	0.000								
	IF	251.000	4.880	0.000	8.500	0.000	0.000	0.000	0.000
0.013	0.000								
	IF	264.000	5.000	0.000	8.500	0.000	0.000	0.000	0.000
0.005	0.000								
	IF	277.000	5.020	0.000	8.500	0.000	0.000	0.000	0.000
0.004	0.000								
	IF	281.000	5.060	0.000	8.500	0.000	0.000	0.000	0.000
0.012	0.000								
	IF	294.000	5.230	0.000	8.500	0.000	0.000	0.000	0.000
0.007	0.000								
	IF	299.000	5.180	0.000	8.500	0.000	0.000	0.000	0.000
-0.015	0.000								
	IF	309.000	5.010	0.000	8.500	0.000	0.000	0.000	0.000
-0.017	0.000								
	IF	319.000	4.840	0.000	8.500	0.000	0.000	0.000	0.000
-0.016	0.000								
	IF	329.000	4.690	0.000	8.500	0.000	0.000	0.000	0.000
-0.014	0.000								
	IF	340.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000
-0.010	0.000								
	IF	350.000	4.480	0.000	8.500	0.000	0.000	0.000	0.000
-0.005	0.000								
	IF	360.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000
-0.002	0.000								
	IF	370.000	4.430	0.000	8.500	0.000	0.000	0.000	0.000
0.000	0.000								
	IF	381.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	391.000	4.460	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	401.000	4.490	0.000	8.500	0.000	0.000	0.000	0.000

				w2					
0.003	0.000								
	IF	411.000	4.520	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	422.000	4.540	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	432.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	442.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000
-0.001	0.000								
	IF	452.000	4.540	0.000	8.500	0.000	0.000	0.000	0.000
-0.002	0.000								
	IF	463.000	4.510	0.000	8.500	0.000	0.000	0.000	0.000
-0.003	0.000								
	IF	473.000	4.480	0.000	8.500	0.000	0.000	0.000	0.000
-0.004	0.000								
	IF	483.000	4.430	0.000	8.500	0.000	0.000	0.000	0.000
-0.004	0.000								
	IF	493.000	4.400	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	503.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000
0.005	0.000								
	IF	514.000	4.510	0.000	8.500	0.000	0.000	0.000	0.000
0.007	0.000								
	IF	524.000	4.590	0.000	8.500	0.000	0.000	0.000	0.000
0.009	0.000								
	IF	534.000	4.680	0.000	8.500	0.000	0.000	0.000	0.000
0.009	0.000								
	IF	544.000	4.780	0.000	8.500	0.000	0.000	0.000	0.000
0.010	0.000								
	IF	555.000	4.890	0.000	8.500	0.000	0.000	0.000	0.000
0.011	0.000								
	IF	565.000	5.020	0.000	8.500	0.000	0.000	0.000	0.000
0.017	0.000								
	IF	574.000	5.210	0.000	8.500	0.000	0.000	0.000	0.000
0.018	0.000								
	IF	575.000	5.200	0.000	8.500	0.000	0.000	0.000	0.000

				w2					
-0.008	0.000								
	IF	585.000	5.120	0.000	8.500	0.000	0.000	0.000	0.000
-0.007	0.000								
	IF	596.000	5.050	0.000	8.500	0.000	0.000	0.000	0.000
-0.007	0.000								
	IF	606.000	4.970	0.000	8.500	0.000	0.000	0.000	0.000
-0.009	0.000								
	IF	616.000	4.880	0.000	8.500	0.000	0.000	0.000	0.000
-0.010	0.000								
	IF	626.000	4.760	0.000	8.500	0.000	0.000	0.000	0.000
-0.011	0.000								
	IF	637.000	4.650	0.000	8.500	0.000	0.000	0.000	0.000
-0.004	0.000								
	IF	647.000	4.680	0.000	8.500	0.000	0.000	0.000	0.000
-0.003	0.000								
	IF	656.000	4.590	0.000	8.500	0.000	0.000	0.000	0.000
-0.009	0.000								
	IF	664.000	4.520	0.000	8.500	0.000	0.000	0.000	0.000
-0.003	0.000								
	IF	672.000	4.540	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	681.000	4.530	0.000	8.500	0.000	0.000	0.000	0.000
-0.001	0.000								
	IF	689.000	4.520	0.000	8.500	0.000	0.000	0.000	0.000
-0.001	0.000								
	IF	698.000	4.520	0.000	8.500	0.000	0.000	0.000	0.000
-0.001	0.000								
	IF	708.000	4.500	0.000	8.500	0.000	0.000	0.000	0.000
-0.002	0.000								
	IF	719.000	4.480	0.000	8.500	0.000	0.000	0.000	0.000
-0.001	0.000								
	IF	729.000	4.490	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	739.000	4.520	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	749.000	4.540	0.000	8.500	0.000	0.000	0.000	0.000

		w2							
0.001	0.000								
	IF	760.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	770.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000
0.000	0.000								
	IF	780.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	790.000	4.600	0.000	8.500	0.000	0.000	0.000	0.000
0.003	0.000								
	IF	801.000	4.610	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	811.000	4.620	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	821.000	4.650	0.000	8.500	0.000	0.000	0.000	0.000
0.004	0.000								
	IF	831.000	4.690	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	842.000	4.680	0.000	8.500	0.000	0.000	0.000	0.000
0.003	0.000								
	IF	852.000	4.760	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	862.000	4.720	0.000	8.500	0.000	0.000	0.000	0.000
-0.002	0.000								
	IF	872.000	4.720	0.000	8.500	0.000	0.000	0.000	0.000
0.001	0.000								
	IF	883.000	4.740	0.000	8.500	0.000	0.000	0.000	0.000
-0.001	0.000								
	IF	893.000	4.710	0.000	8.500	0.000	0.000	0.000	0.000
0.000	0.000								
	IF	903.000	4.740	0.000	8.500	0.000	0.000	0.000	0.000
0.003	0.000								
	IF	913.000	4.770	0.000	8.500	0.000	0.000	0.000	0.000
0.003	0.000								
	IF	924.000	4.800	0.000	8.500	0.000	0.000	0.000	0.000
0.003	0.000								
	IF	925.000	4.810	0.000	8.500	0.000	0.000	0.000	0.000

w2

0.003	0.000								
	IF	934.000	4.830	0.000	8.500	0.000	0.000	0.000	0.000
0.002	0.000								
	IF	944.000	4.840	0.000	8.500	0.000	0.000	0.000	0.000
-0.017	0.000								
	IF	954.000	4.490	0.000	8.500	0.000	0.000	0.000	0.000
-0.035	0.000								
	ET	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000								
1									

	END	END	FETCH	SURGE	ELEV	SURGE	ELEV	INITIAL	INITIAL	BOTTOM
AVERAGE	STATION	ELEVATION	LENGTH	10-YEAR	100-YEAR	WAVE HEIGHT	W. PERIOD			SLOPE
A-ZONES										
IE	0.000	0.000	100.000	3.000	8.500	31.800	12.000	98.000		0.370
0.000										

	END	END	NEW SURGE	NEW SURGE						BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE
A-ZONES										
IF	5.000	1.850	0.000	8.500	0.000	0.000	0.000	0.000		0.168
0.000										

	END	END	NEW SURGE	NEW SURGE						BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR						SLOPE
A-ZONES										
IF	12.000	2.010	0.000	8.500	0.000	0.000	0.000	0.000		0.023
0.000										

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	19.000	2.170		0.000	8.500	0.000	0.000	0.000	0.000	0.017
IF										
0.000										

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	27.000	2.270		0.000	8.500	0.000	0.000	0.000	0.000	0.028
IF										
0.000										

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	40.000	2.750		0.000	8.500	0.000	0.000	0.000	0.000	0.035
IF										
0.000										

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	51.000	3.120		0.000	8.500	0.000	0.000	0.000	0.000	0.033
IF										
0.000										

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES										

	STATION	ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR	w2				
IF 0.000	53.000	3.180	0.000	8.500	0.000	0.000	0.000	0.000	0.024
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	66.000	3.480	0.000	8.500	0.000	0.000	0.000	0.000	0.022
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	80.000	3.760	0.000	8.500	0.000	0.000	0.000	0.000	0.021
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	87.000	3.920	0.000	8.500	0.000	0.000	0.000	0.000	0.030
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	94.000	4.180	0.000	8.500	0.000	0.000	0.000	0.000	0.048

					w2				
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	103.000	4.690	0.000	8.500	0.000	0.000	0.000	0.000	0.058
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	106.000	4.880	0.000	8.500	0.000	0.000	0.000	0.000	0.062
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	108.000	5.000	0.000	8.500	0.000	0.000	0.000	0.000	0.026
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	119.000	5.220	0.000	8.500	0.000	0.000	0.000	0.000	0.020
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE

	STATION	ELEVATION	10-YEAR	100-YEAR	w2				
IF 0.000	132.000	5.490	0.000	8.500	0.000	0.000	0.000	0.000	0.020
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	143.000	5.700	0.000	8.500	0.000	0.000	0.000	0.000	0.020
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	145.000	5.750	0.000	8.500	0.000	0.000	0.000	0.000	-0.054
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	159.000	4.830	0.000	8.500	0.000	0.000	0.000	0.000	-0.085
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	169.000	3.700	0.000	8.500	0.000	0.000	0.000	0.000	-0.075

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	176.000	3.550	0.000	8.500	0.000	0.000	0.000	0.000	-0.004
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	186.000	3.630	0.000	8.500	0.000	0.000	0.000	0.000	0.016
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	196.000	3.880	0.000	8.500	0.000	0.000	0.000	0.000	0.023
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	204.000	4.050	0.000	8.500	0.000	0.000	0.000	0.000	0.021
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES										

	STATION	ELEVATION	10-YEAR	100-YEAR	w2				
IF 0.000	211.000	4.200	0.000	8.500	0.000	0.000	0.000	0.000	0.018
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	225.000	4.430	0.000	8.500	0.000	0.000	0.000	0.000	0.017
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	235.000	4.610	0.000	8.500	0.000	0.000	0.000	0.000	0.018
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	238.000	4.660	0.000	8.500	0.000	0.000	0.000	0.000	0.017
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	251.000	4.880	0.000	8.500	0.000	0.000	0.000	0.000	0.013

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES										
IF	264.000	5.000		0.000	8.500	0.000	0.000	0.000	0.000	0.005
0.000										

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES										
IF	277.000	5.020		0.000	8.500	0.000	0.000	0.000	0.000	0.004
0.000										

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES										
IF	281.000	5.060		0.000	8.500	0.000	0.000	0.000	0.000	0.012
0.000										

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES										
IF	294.000	5.230		0.000	8.500	0.000	0.000	0.000	0.000	0.007
0.000										

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES										

	STATION	ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR	w2				
IF 0.000	299.000	5.180	0.000	8.500	0.000	0.000	0.000	0.000	-0.015
AVERAGE	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE
A-ZONES IF 0.000	309.000	5.010	0.000	8.500	0.000	0.000	0.000	0.000	-0.017
AVERAGE	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE
A-ZONES IF 0.000	319.000	4.840	0.000	8.500	0.000	0.000	0.000	0.000	-0.016
AVERAGE	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE
A-ZONES IF 0.000	329.000	4.690	0.000	8.500	0.000	0.000	0.000	0.000	-0.014
AVERAGE	END STATION	END ELEVATION	NEW SURGE 10-YEAR	NEW SURGE 100-YEAR					BOTTOM SLOPE
A-ZONES IF 0.000	340.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000	-0.010

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	350.000	4.480		0.000	8.500	0.000	0.000	0.000	0.000	-0.005
IF	0.000									
		END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	360.000	4.440		0.000	8.500	0.000	0.000	0.000	0.000	-0.002
IF	0.000									
		END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	370.000	4.430		0.000	8.500	0.000	0.000	0.000	0.000	0.000
IF	0.000									
		END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	381.000	4.440		0.000	8.500	0.000	0.000	0.000	0.000	0.001
IF	0.000									
		END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES										

	IF				w2				
	391.000	4.460	0.000	8.500	0.000	0.000	0.000	0.000	0.002
0.000									
	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES									
IF	401.000	4.490	0.000	8.500	0.000	0.000	0.000	0.000	0.003
0.000									
	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES									
IF	411.000	4.520	0.000	8.500	0.000	0.000	0.000	0.000	0.002
0.000									
	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES									
IF	422.000	4.540	0.000	8.500	0.000	0.000	0.000	0.000	0.001
0.000									
	END	END	NEW SURGE	NEW SURGE					BOTTOM
AVERAGE	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES									
IF	432.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000	0.001
0.000									

					w2				
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	442.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000	-0.001
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	452.000	4.540	0.000	8.500	0.000	0.000	0.000	0.000	-0.002
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	463.000	4.510	0.000	8.500	0.000	0.000	0.000	0.000	-0.003
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	473.000	4.480	0.000	8.500	0.000	0.000	0.000	0.000	-0.004
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE

	STATION	ELEVATION	10-YEAR	100-YEAR	w2				
IF 0.000	483.000	4.430	0.000	8.500	0.000	0.000	0.000	0.000	-0.004
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	493.000	4.400	0.000	8.500	0.000	0.000	0.000	0.000	0.001
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	503.000	4.440	0.000	8.500	0.000	0.000	0.000	0.000	0.005
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	514.000	4.510	0.000	8.500	0.000	0.000	0.000	0.000	0.007
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	524.000	4.590	0.000	8.500	0.000	0.000	0.000	0.000	0.009

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	534.000	4.680	0.000	8.500	0.000	0.000	0.000	0.000	0.009
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	544.000	4.780	0.000	8.500	0.000	0.000	0.000	0.000	0.010
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	555.000	4.890	0.000	8.500	0.000	0.000	0.000	0.000	0.011
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	565.000	5.020	0.000	8.500	0.000	0.000	0.000	0.000	0.017
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES										

	STATION	ELEVATION	10-YEAR	100-YEAR	w2				
IF 0.000	574.000	5.210	0.000	8.500	0.000	0.000	0.000	0.000	0.018
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	575.000	5.200	0.000	8.500	0.000	0.000	0.000	0.000	-0.008
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	585.000	5.120	0.000	8.500	0.000	0.000	0.000	0.000	-0.007
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	596.000	5.050	0.000	8.500	0.000	0.000	0.000	0.000	-0.007
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	606.000	4.970	0.000	8.500	0.000	0.000	0.000	0.000	-0.009

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	616.000	4.880		0.000	8.500	0.000	0.000	0.000	0.000	-0.010
IF	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	626.000	4.760		0.000	8.500	0.000	0.000	0.000	0.000	-0.011
IF	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	637.000	4.650		0.000	8.500	0.000	0.000	0.000	0.000	-0.004
IF	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	647.000	4.680		0.000	8.500	0.000	0.000	0.000	0.000	-0.003
IF	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES										
IF										

	STATION	ELEVATION	10-YEAR	100-YEAR	w2				
IF 0.000	656.000	4.590	0.000	8.500	0.000	0.000	0.000	0.000	-0.009
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	664.000	4.520	0.000	8.500	0.000	0.000	0.000	0.000	-0.003
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	672.000	4.540	0.000	8.500	0.000	0.000	0.000	0.000	0.001
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	681.000	4.530	0.000	8.500	0.000	0.000	0.000	0.000	-0.001
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	689.000	4.520	0.000	8.500	0.000	0.000	0.000	0.000	-0.001

					w2				
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	698.000	4.520	0.000	8.500	0.000	0.000	0.000	0.000	-0.001
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	708.000	4.500	0.000	8.500	0.000	0.000	0.000	0.000	-0.002
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	719.000	4.480	0.000	8.500	0.000	0.000	0.000	0.000	-0.001
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	729.000	4.490	0.000	8.500	0.000	0.000	0.000	0.000	0.002
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE

	STATION	ELEVATION	10-YEAR	100-YEAR	w2				
IF 0.000	739.000	4.520	0.000	8.500	0.000	0.000	0.000	0.000	0.002
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	749.000	4.540	0.000	8.500	0.000	0.000	0.000	0.000	0.001
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	760.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000	0.001
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	770.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000	0.000
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	780.000	4.550	0.000	8.500	0.000	0.000	0.000	0.000	0.002

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	790.000	4.600	0.000	8.500	0.000	0.000	0.000	0.000	0.003
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	801.000	4.610	0.000	8.500	0.000	0.000	0.000	0.000	0.001
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	811.000	4.620	0.000	8.500	0.000	0.000	0.000	0.000	0.002
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES	IF	821.000	4.650	0.000	8.500	0.000	0.000	0.000	0.000	0.004
	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE		STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
A-ZONES										

	STATION	ELEVATION	10-YEAR	100-YEAR	w2				
IF 0.000	831.000	4.690	0.000	8.500	0.000	0.000	0.000	0.000	0.001
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	842.000	4.680	0.000	8.500	0.000	0.000	0.000	0.000	0.003
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	852.000	4.760	0.000	8.500	0.000	0.000	0.000	0.000	0.002
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	862.000	4.720	0.000	8.500	0.000	0.000	0.000	0.000	-0.002
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	872.000	4.720	0.000	8.500	0.000	0.000	0.000	0.000	0.001

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	883.000	4.740		0.000	8.500	0.000	0.000	0.000	0.000	-0.001
IF	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	893.000	4.710		0.000	8.500	0.000	0.000	0.000	0.000	0.000
IF	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	903.000	4.740		0.000	8.500	0.000	0.000	0.000	0.000	0.003
IF	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES	913.000	4.770		0.000	8.500	0.000	0.000	0.000	0.000	0.003
IF	0.000									

		END	END	NEW SURGE	NEW SURGE	w2				BOTTOM
AVERAGE	STATION	ELEVATION		10-YEAR	100-YEAR					SLOPE
A-ZONES										
IF										

	STATION	ELEVATION	10-YEAR	100-YEAR	w2				
IF 0.000	924.000	4.800	0.000	8.500	0.000	0.000	0.000	0.000	0.003
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	925.000	4.810	0.000	8.500	0.000	0.000	0.000	0.000	0.003
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	934.000	4.830	0.000	8.500	0.000	0.000	0.000	0.000	0.002
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	944.000	4.840	0.000	8.500	0.000	0.000	0.000	0.000	-0.017
AVERAGE	END	END	NEW SURGE	NEW SURGE					BOTTOM
A-ZONES	STATION	ELEVATION	10-YEAR	100-YEAR					SLOPE
IF 0.000	954.000	4.490	0.000	8.500	0.000	0.000	0.000	0.000	-0.035

w2
-----END OF
TRANSECT-----

NOTE:

SURGE ELEVATION INCLUDES CONTRIBUTIONS FROM ASTRONOMICAL AND STORM TIDES.

1

PART2: CONTROLLING WAVE HEIGHTS, SPECTRAL
PEAK WAVE PERIOD, AND WAVE CREST ELEVATIONS

LOCATION	CONTROLLING WAVE HEIGHT	SPECTRAL PEAK WAVE PERIOD	WAVE CREST ELEVATION
IE 0.00	6.51	12.00	13.06
IF 5.00	5.11	12.00	12.08
IF 12.00	4.99	12.00	12.00
IF 19.00	4.87	12.00	11.91
IF 27.00	4.80	12.00	11.86
IF 40.00	4.43	12.00	11.60
IF 51.00	4.15	12.00	11.40
IF 53.00	4.10	12.00	11.37
IF 66.00	3.87	12.00	11.21
IF 80.00	3.66	12.00	11.06

w2

IF	87.00	3.54	12.00	10.98
IF	94.00	3.34	12.00	10.84
IF	103.00	2.95	12.00	10.56
IF	106.00	2.80	12.00	10.46
IF	108.00	2.71	12.00	10.40
IF	119.00	2.54	12.00	10.28
IF	132.00	2.33	12.00	10.13
IF	143.00	2.17	12.00	10.02
IF	145.00	2.13	12.00	9.99
IF	159.00	2.32	12.00	10.12
IF	169.00	2.47	12.00	10.23
IF	176.00	2.51	12.00	10.25
IF	186.00	2.53	12.00	10.27
IF	196.00	2.54	12.00	10.28
IF	204.00	2.54	12.00	10.28
IF	211.00	2.54	12.00	10.28
IF	225.00	2.54	12.00	10.28
IF	235.00	2.54	12.00	10.28

w2

IF	238.00	2.54	12.00	10.28
IF	251.00	2.52	12.00	10.27
IF	264.00	2.52	12.00	10.26
IF	277.00	2.54	12.00	10.27
IF	281.00	2.53	12.00	10.27
IF	294.00	2.51	12.00	10.26
IF	299.00	2.53	12.00	10.27
IF	309.00	2.58	12.00	10.31
IF	319.00	2.63	12.00	10.34
IF	329.00	2.67	12.00	10.37
IF	340.00	2.71	12.00	10.40
IF	350.00	2.74	12.00	10.42
IF	360.00	2.76	12.00	10.43
IF	370.00	2.78	12.00	10.45
IF	381.00	2.79	12.00	10.46
IF	391.00	2.80	12.00	10.46
IF	401.00	2.81	12.00	10.47
IF	411.00	2.82	12.00	10.47

w2

IF	422.00	2.83	12.00	10.48
IF	432.00	2.84	12.00	10.49
IF	442.00	2.85	12.00	10.50
IF	452.00	2.87	12.00	10.51
IF	463.00	2.89	12.00	10.52
IF	473.00	2.90	12.00	10.53
IF	483.00	2.93	12.00	10.55
IF	493.00	2.94	12.00	10.56
IF	503.00	2.95	12.00	10.56
IF	514.00	2.94	12.00	10.56
IF	524.00	2.94	12.00	10.56
IF	534.00	2.92	12.00	10.55
IF	544.00	2.88	12.00	10.52
IF	555.00	2.79	12.00	10.46
IF	565.00	2.69	12.00	10.39
IF	574.00	2.55	12.00	10.28
IF	575.00	2.55	12.00	10.29
IF	585.00	2.58	12.00	10.31

w2

IF	596.00	2.61	12.00	10.33
IF	606.00	2.64	12.00	10.35
IF	616.00	2.67	12.00	10.37
IF	626.00	2.71	12.00	10.40
IF	637.00	2.75	12.00	10.42
IF	647.00	2.75	12.00	10.43
IF	656.00	2.78	12.00	10.45
IF	664.00	2.81	12.00	10.46
IF	672.00	2.81	12.00	10.47
IF	681.00	2.83	12.00	10.48
IF	689.00	2.84	12.00	10.49
IF	698.00	2.85	12.00	10.50
IF	708.00	2.87	12.00	10.51
IF	719.00	2.88	12.00	10.52
IF	729.00	2.89	12.00	10.53
IF	739.00	2.90	12.00	10.53
IF	749.00	2.91	12.00	10.53
IF	760.00	2.92	12.00	10.54

w2

IF	770.00	2.93	12.00	10.55
IF	780.00	2.94	12.00	10.56
IF	790.00	2.94	12.00	10.55
IF	801.00	2.94	12.00	10.56
IF	811.00	2.95	12.00	10.57
IF	821.00	2.95	12.00	10.57
IF	831.00	2.95	12.00	10.56
IF	842.00	2.96	12.00	10.57
IF	852.00	2.89	12.00	10.53
IF	862.00	2.91	12.00	10.54
IF	872.00	2.92	12.00	10.55
IF	883.00	2.91	12.00	10.54
IF	893.00	2.93	12.00	10.55
IF	903.00	2.91	12.00	10.54
IF	913.00	2.89	12.00	10.52
IF	924.00	2.86	12.00	10.50
IF	925.00	2.86	12.00	10.50
IF	934.00	2.84	12.00	10.49

w2

IF	944.00	2.83	12.00	10.48
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IF	954.00	2.92	12.00	10.55
----	--------	------	-------	-------

TRANSMITTED WAVE HEIGHT AT LAST FETCH OR OBSTRUCTION = 2.92 WHICH EXCEEDS 0.5.

PART3 LOCATION OF AREAS ABOVE 100-YEAR SURGE

NO AREAS ABOVE 100-YEAR SURGE IN THIS TRANSECT

PART4 LOCATION OF SURGE CHANGES

STATION	10-YEAR SURGE	100-YEAR SURGE
---------	---------------	----------------

NO SURGE CHANGES IN THIS TRANSECT

PART5 LOCATION OF V ZONES

STATION OF GUTTER	LOCATION OF ZONE
-------------------	------------------

101.80	WINDWARD
--------	----------

PART6 NUMBERED A ZONES AND V ZONES

STATION OF GUTTER	ELEVATION	ZONE DESIGNATION	FHF
-------------------	-----------	------------------	-----

0.00	13.06		
------	-------	--	--

w2

		V17	EL=13	85
2.85	12.50			
		V17	EL=12	85
45.65	11.50			
		V17	EL=11	85
101.80	10.60			
		A15	EL=11	75
104.86	10.50			
		A15	EL=10	75
445.10	10.50			
		A15	EL=11	75
546.80	10.50			
		A15	EL=10	75
702.11	10.50			
		A15	EL=11	75
924.81	10.50			
		A15	EL=10	75
946.76	10.50			

w2

A15 EL=11 75

954.00

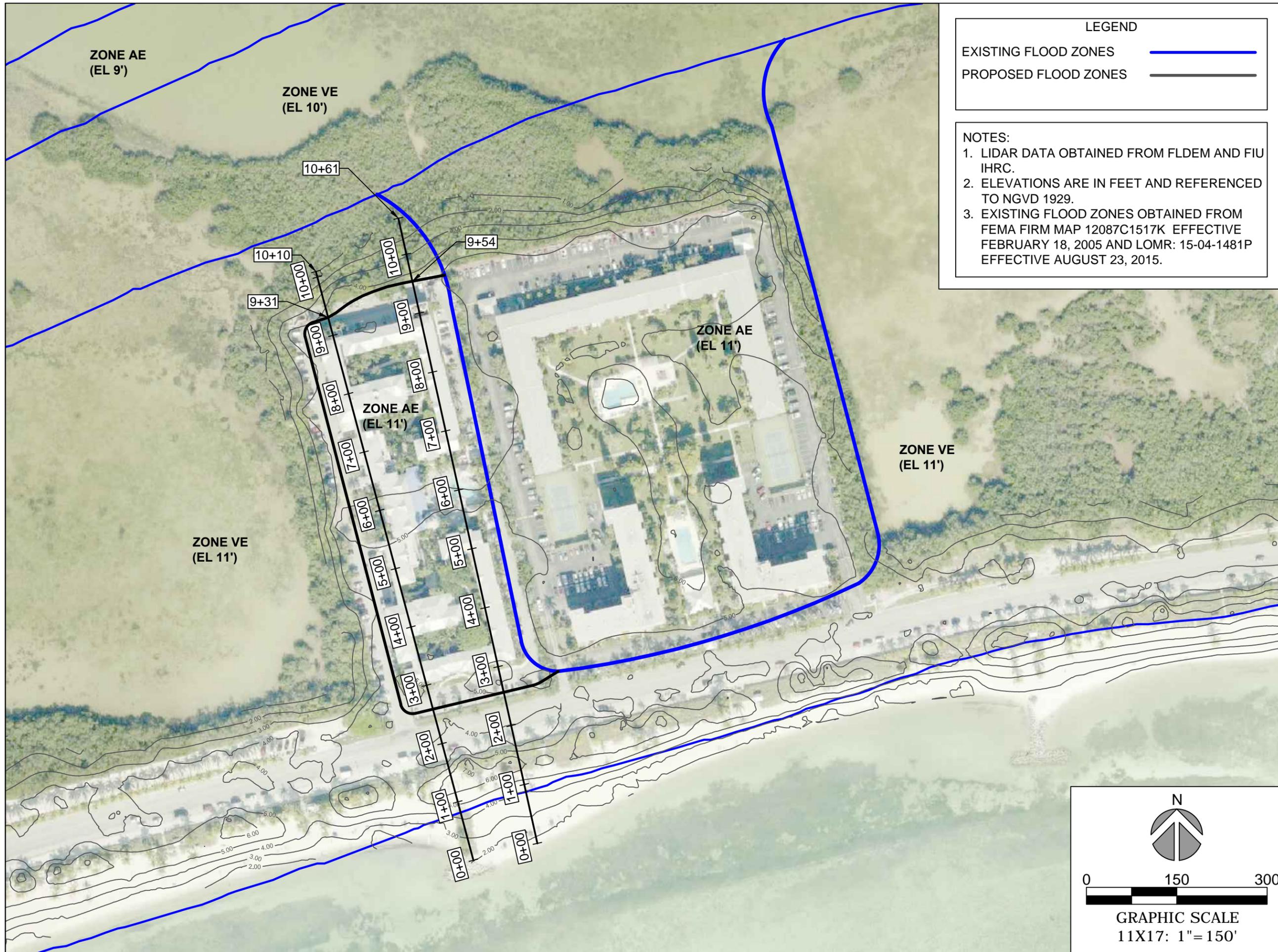
10.55

ZONE TERMINATED AT END OF TRANSECT

PART 7 POSTSCRIPT NOTES

Appendix C

Proposed Floodmap



LEGEND	
EXISTING FLOOD ZONES	
PROPOSED FLOOD ZONES	

NOTES:

- LIDAR DATA OBTAINED FROM FLDEM AND FIU IHRC.
- ELEVATIONS ARE IN FEET AND REFERENCED TO NGVD 1929.
- EXISTING FLOOD ZONES OBTAINED FROM FEMA FIRM MAP 12087C1517K EFFECTIVE FEBRUARY 18, 2005 AND LOMR: 15-04-1481P EFFECTIVE AUGUST 23, 2015.

PROJECT
SHERATON KEY WEST
 LOMR
 2001 S ROOSEVELT BLVD
 KEY WEST, FL 33040

CLIENT
DIAMOND ROCK
 HOSPITALITY CO.
 2001 S ROOSEVELT BLVD
 KEY WEST, FL 33040

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ISSUE	DATE	DRAWING SUBMITTAL	SUBMISSION / REVISION
1	2/3/2015		

PROJECT NO. 35300
 DRAWN LBA
 CHECKED JAC
 SCALE AS SHOWN

SHEET TITLE
WHAFIS TRANSECTS
& PROPOSED FLOOD
ZONES

SHEET 1 OF 1
C

